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LEADING ARTICLES

TOURING THE DECCAN.

FIFTH LETTER.

ROBERT G. ECCLES, M. D.

BROOKLYN, N. Y.

The Famous Cave Temples—Travellers at Madura—The Native Open Palm—Travelling a la Pullman—Brahmin Orthodox Teaching and Impure Water—Temples of Southern India—Unclean Customs of the Hindoo—The Bubonic Plague at Bombay—The Parsees—The Plague and Its Causes.

NATURE has divided India into two grand divisions, the line of demarcation of which is the Nerbudda River. The Deccan, or "Country of the South," is, from a geological, biological and geographical standpoint, probably the most remarkable as well as the most interesting region on our globe, while the north country, from an ethnological viewpoint is, without doubt, incomparably, the most interesting. Few visiting tourists are familiar enough with science to appreciate these facts or to care for the bearings they are likely to have on the future beliefs and future destinies of mankind. It never occurs to them, when going through the Deccan, that here is the present battlefield between the believers and disbelievers of the great land of Lemuria, that is supposed to have occupied much of the present Indian Ocean. They travel over thousands of miles of country that constitutes one of the strangest geological sights upon this globe and never give it a thought or, save in the most superficial manner possible, even look at it intelligently. Here is found what Chamberlin and Salisbury, in their Geology, tell us is "The most stupendous outflows of lava recorded in the earth's history." Some 200,000 square miles of this region is covered with this lava to depths varying from 4,000 to 6,000 feet. It has been estimated that there is enough there to cover the entire dry land of the world to a depth of many inches. The outpourings of Vesuvius, Pellee, Heckla, Etna, Mauna Loa, Kileau, and all the rest of our modern volcanoes combined, are but insignificant squirts as compared with this. To see it is alone worth a trip to India. To see man's efforts, in past ages, at utilizing these outpourings as defense in war and as religious retreats is of equal interest. The Hill Forts of the Deccan were at one time among the most impregnable on the earth.

THE FAMOUS CAVE TEMPLES.

The Cave Temples of this same region out rival everything of their kind on this globe. Every tourist in India hears of the cave at Elephanta, and rarely does one go through Bombay without visiting it. Few learn of those of Karli, Ajanta and of Ellora, and fewer still ever visit them because they happen to lie off the beaten track. That on the island of Elephanta is certainly well worth seeing, but the others are so far superior that it seems too bad that more travellers do not visit them. They are all artificial caves cut into the lava mountains by the hand of man. At Elephanta the early Portugese visitors played sad havoc with the beautiful columns at the entrance. In religious zeal they trained their cannons upon them so as to destroy such, to them, detestable evidences of paganism and idolatry. The Karli caves, being at a greater distance from Bombay escaped such vandalism. The principal one of these is four miles from the railway station and was excavated about 200 years before the Christian era. It is cut into the hard lava to a depth of 124 feet 3 inches and has a width from wall to wall, of 45 feet 6 inches. From the floor to the roof is 46 feet. The interior resembles an early Christian church. The side aisles are separated from the nave by fif-

teen handsome columns and at the extreme end is a dagoba or place in which were kept the sacred relics of saints. In front of the entrance are carved columns bearing figures of elephants, lions and images of men and women in ancient Hindoo costume. At Ellora so numerous are the caves that I found it quite wearying to try and see so many.

The Kailasa Temple is a marvel among these many marvels. Only the faintest kind of a conception can be given of it either by word picture or photograph. Indeed it is difficult to realize, even when on the ground and looking at it, that the immense and highly ornate structure with its surrounding satuary, its huge and beautiful columns, its carved walls, its porches, its shrines, chapels and halls, its courts and squares, are all composed of but one solid piece of stone, and that that stone is still a part of the contiguous mountain. Those who cut it out had a collosal task to perform, and they did it well. Visitors to India who have seen Elephanta leave that country with an entirely false impression as regards what is to be seen at Ellora. Kailasa is in no sense a cave such as that of Elephanta. It is a magnificent structure standing out from the mountain of which it forms a part. It has been carved out into pinnacles and ornamental towers, galleries, doors, corridors, gigantic elephants, rock-cut screens serving as windows, etc. Immense stone flagstaffs rise from the square on each side of one of the shrines. The basement is covered with relief figures of elephants, mythological monsters and religous scenes. The central hall alone measures 57 feet by 55 feet and is surrounded by broad aisles and has large chapels outside of these. Stone bridges cross from the main building to some of the chapels, reminding one somwehat of the Bridge of Sighs at Venice.

Our tour of the Deccan included visits to Tutticorin, Madura, Trichonapoly, Tanjore, Madras, Poona, Lanouli, Karli, Bombay, Elephanta, Nassik, Daulatibad and Ellora. There were many other interesting points which we had planned to see in that region, but fearing the effects of the approaching hot weather we limited our sightseeing to these. Ellora was among the last of the places visited, although it is here referred to first.

TRAVELLERS AT MADURA.

After "doing" Ceylon we sailed from Colombo, on theBritish India Steamship Lama, for Tutticorin. The journey took about eleven hours. As there is no harbor at the latter place, and as the coast is shallow, we had to disembark five miles from the shore and enter India on a small steam launch. After running the gauntlet of the custom officers we proceeded to the railway station to catch the earliest train for Madura. Having a wait of about three hours we filled the time in studying a motley throng of native travellers who were penned up within a fenced area awaiting the order of the health officers. There were about 500 of them, and as they had come from infected parts of the country they were not permitted to proceed on their journeys until they had been examined and found to be in good health. Out of the large number thus quarantined only a very few of them were on their feet. As there were no seats for them they were all contentedly resting upon the ground cross-legged, as tailors sit, and anxiously awaiting the orders for their release. A more kaledioscopic looking crowd could hardly be imagined. No farmer's wife every designed a "crazyquilt" that contained so many or so tortuously arranged an array of colors. There were turbans, dresses, and sashes representing every tint of the rainbow. A few were made of silk and a few more of wool, but the great bulk of them were cotton. Shiny brown faces surmounted with jet black hair and bejewelled with gold, silver, brass and colored glass ornaments were framed in vestments of red, green, blue, purple, magenta, orange and white. As they were all away from home they were, of course, dressed in their best. Many of the garments showed fading and the tell tale dirt of poverty, but most of them seemed to be fresh from the dyer's vat. But those brown faces were a study as well as a surprise to strangers. A very large proportion of them had their foreheads, and some their breasts painted in white, gray and red designs that indicated the religions to which they belonged. The Sivaites had four, parallel, white lines on their foreheads. The Vishnuites had a white mark, like a capital V, drawn at the upper end of their noses and in its center was a red line. Others had round dots of various colors and of conspicuous size placed in the same region. Still others had somehting like the prong of a Neptune's trident painted on their forehead. The inner prong was usually of a red color. The worshippers of Kali had the entire forehead, and frequently their bared breast, daubed thickly with the ash of cow manure. So prominent were most of these markings that the inevitable suggestion to an American mind was that of clowns in a circus.

THE NATIVE OPEN PALM.

On the arrival of our train we learned that it would be late ere we could get anything to eat. As there was a restaurant at the station

I ordered a lunch sent out to our car. Very soon a native servant appeared bearing a small package wrapped in paper. Its size brought up visions of coming hunger and I was about to return to the restaurant and ask for more. Soon, however, there came along another servant, then another, and another, and so on until nine of them stood before me, each with a minute paper package which he handed to me. On opening these I found one containing bread, another salt, another eggs, another butter, another meat, another cake, etc. Every man had a separate and single article, and every man was waiting for me to bestow "baksheesh" upon him for bringing the same, although I had paid for them to the keeper of the restaurant. No sooner did I put my hand into my pocket to get some change to bestow upon them than all nine of them opened up hands placed together, palms up, as a significant indication that they wished for large presents. All over India this habit of holding up the palms for a double handful is the usual greeting the tourist receives from a large number of servants every time he is about to leave a hotel.

TRAVELLING A LA PULLMAN.

When our train started curiosity led us to inspect its make-up. Every first-class carriage in India is convertible at night into a sleeping car. Berths are let down from above, as in our Pullman cars. No bedding, however, is supplied by the railway company. Every tourist must carry his own bedding or hire a servant to carry it for him. Attached to the first-class cars are small compartments for servants, with an entering door into them, and here they ride at third-class rates. In hotels, railway stations, and in railway carriages there are no closets of the kind to which we are accustomed. They are all supplied with commodes and these are attended to by the low caste natives. This abomination is one that produces a sense of incessant discomfort to sensitive people, and is far from being free from danger to public health.

BRAHMIN ORTHODOX TEACHING AND IMPURE WATER.

Madura was our first stopping-place. There we had as guide a devout Brahmin, named Paraman Messer, who lectured us on the duty of faith, the nature of purity, and the meaning of idol worship. Faith, he informed us, was a duty we owed ourselves, and that like little children we should accept whatever the priest told us in the most unreserved manner. "How silly," he said, "we would have been if in childhood we had refused to accept what our teachers taught us concerning the alphabet. To have insisted in asking proof of why A was A and why it was not B would have made it impossible for us to have been taught to read." He assured us that water is purity itself and whoever drinks of the living water of holy streams or of the temple tanks purify themselves through and through. Just then I pointed to the temple tank, the Tank of the Golden Lillies, and seeing a crowd bathing in it and observing a dirty green scum over its surface, I asked him if that was "purity itself." For reply he filled a cup and drank, after which he refilled it and requested me to drink. He did not much relish my refusal and thought me a rather incorrigible pupil. I had, however, learned a most serious lesson of terrestrial hygiene, and one that I am not likely to soon forget. This peep into the mind of a Brahmin gave me the key to the unspeakably filthy habit of the average Hindoo. It taught me, too, how it happens that from this center radiates the fierce epidemics that every once in a while sweep over the earth. To believe that water is purity, however defiled, is to be willing to do all the strange things that I have since seen the Hindoos do. Never have I seen a people that tries so hard to keep clean and never one that is so disgustingly dirty. A day later it was my fortune to see one of them dip muddy water from a street drain and use it to clean his mouth and teeth, although he must have known that the putrid dejecta of men and beasts defiled it. It is a constant habit for them to stand over a well or tank, wash their bodies with the water, and let the washings run back into the same while others are drawing that water for culinary and drinking purposes. They even wash their mouths in the sacred tank out of which others drink.

TEMPLES OF SOUTHERN INDIA.

Of all the modern temples of Southern India only one at Nassik met my ideas of real beauty in architecture. Those of Madura, Tanjore and Trichonapoly are impressive when seen at a distance. On close inspection they are very disappointing. Every carved image is grotesque and untrue, more nearly resembling gargoyles than monuments or picture lessons. The people do not seem to invest them with any idea of sacredness. They sleep in them, loaf in them, eat in them, play games of chance in them, and occupy them as common marts for the sale of merchandise. Only the spots occupied by the lingums seem to be held in any degree of reverence. When we pause to weigh in our minds what this signifies we can have but little respect for either temples or people.

To go through them is to have our senses of both sight and smell outraged. The nightmare images of their gods are daily daubed with vermillin and castor oil. The castor oil lamps and tallow candles reek to heaven with vile effluvia. Even our ears must endure the torture of discordant drums beaten out of time to the sounds of discordant horns and jangling bells that are intended to drive out the devils that we poor foreigners are supposed to bring along with us. Priests bring threaded jessamine and rosemary necklaces, place them over our necks, offer a prayer for our prosperity, and then turn around and demand pay for services we did not request.

UNCLEAN CUSTOMS OF THE HINDOO.

As we turned away from the temples and went into the streets again we were met with Hindoo uncleanliness. Foods of many kinds are displayed for sale not only in, but actually on the streets. All kinds of grains, peas, beans, potatoes, fruits, sweetmeats and bread are laid down on dirty thin mats upon the street and there offered for sale. Frequently not even a mat lies between the dirt and the food. It is no uncommon thing for cows to come along and spatter such food with their droppings. The walls of the houses are stuck all over with animal manure that has been picked from the street, patted with the hands into cakes and then placed there to dry. In every quarter of these native cities this sort of disfigurement is conspicuous and everywhere can be seen women and children collecting, moulding, and drying dung. It seems to form a large part of the fuel used and the dried cakes are offered for sale as coal or wood are in this country. The germ-laden dust from this traffic must be ubiquitous and when added to the deposit of flies it does seem as if no article of food can be free from pathogenic contamination. Where goat meat, clotted milk, sweetened rice, and other such oriental delicacies, are exposed for sale immediately under the feet of passing purchasers and where sacred animals have preferential right of way over such foodstuffs, one cannot hope for hygienic conditions. But the funny part of this tragic state of affairs is the way that these people look upon us. Because we acknowledge ourselves casteless, and because we are willing to sympathize with and try to elevate their no caste pariahs, they actually consider us common and unclean. We are no better in their eyes than are the down-trodden and despised men and women who clean their streets and do their unnamable work. If we touch an article designed for use in the handling or conveyance to their mouths of food or drink it becomes, from that moment, utterly defiled. To enter a mart where such articles are offered for sale is to create immediate consternation on the part of the merchant. He watches every move and every act with unfeigned fear for whatever we touch must be destroyed and never again offered for sale. In none of their homes could an American or European get a drink of water or a morsel of food unless every handled vessel was paid for and even then, some of the extremely orthodox would not consent nor permit admission to their home. Christian missions have to provide special chapels for no-caste natives to worship in as the feeling is so strong against them that the lowest caste men, even after becoming liberal in faith, will not be seen associating with them. It is not generally known in America that every Hindoo who visits our country, or any Caucasian country, by that very act forfeits his caste and becomes a despised renegade. The railways are doing more to liberalize them and break down these senseless barriers than all other agencies put togeher. In making pilgrimages to their sacred rivers and sacred cities the most devout are forced into contact with low caste and sometimes no-caste people, so that by perceptible degrees concessions have to be made and compromises with conscience accomplished.

The poor pariahs have a horrible condition of life to endure. They are cuffed, kicked and whipped unmercifully for the simplest infractions of supposed duty. To dare to retaliate would mean a public scourging, or even death. At Tanjore I saw one maltreated in this way by a railway official. When his tormentor had gone I gave him, as a soothing balm, a four anna piece. This is worth in our money eight cents, but was the equivalent of a couple days of earnings to the poor fellow. He first looked at the money in astonishment, then he took a look at me to see if I really intended that he should have it, and on making up his mind that it was intended for him, tears welled up into his eyes. Before I knew what he was about he was down on his knees before me kissing the ends of my shoes. Until my train came to bear me away he watched me like a faithful dog, anticipated my every move, and did everything he dared to do to make things comfortable for me.

In Tanjore is "Sri Besant Lodge," the miserable little headquarters of the Theosophists. Madame Blavatski's efforts, coupled with those of her English and American supporters, have but little to show for thirty years of miracles and difficult propoganda.

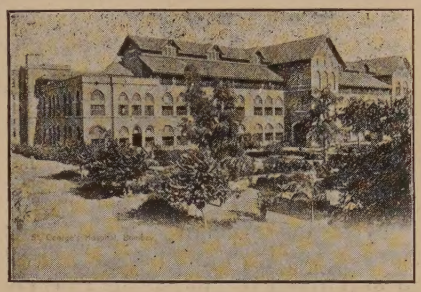
At Trichonapoly, after giving due attention to the temple of Sri Rangam and the Hall of 1000 Pillars, we paid a visit to the

tank in which Bishop Reginald Heber was so unfortunate as to lose his life. Bishop Heber is well known to every American as the author of that most popular of Sunday school hymns, "From Greenland's Icy Mountains." Students of history do not need to be reminded of the fact that the country around Trichonapoly figured largely in establishing the conditions that led to the birth of the United States. In England's wars with France she exhausted her revenue, and driven to the verge of desperation from lack of ready cash, she passed the obnoxious stamp tax which brought down the anethemas of the American colonists. One of the largest of the sink-holes into which British gold had then been poured was here in the Deccan. France was driven out of India. Clive triumphed over Lally at about the time that Otis made the inflammatory speech in this country against King George. The humiliation which this brought upon France was the chief cause of the strong sentiment it gave the French in our favor that led to the secret sending of money and other help to America. The thoroughness of the subjugation of France inflated the feelings of the dominant party in England to such a degree that they would listen to no words of conciliation regarding the "rebel" sentiment of the "colonists." Tom Gage's proclamation lit up the then half smothered conflagration and the Declaration of Independence came as a logical consequence. England by winning the Empire of India lost her far more valuable assets in America.

THE BUBONIC PLAGUE AT BOMBAY.

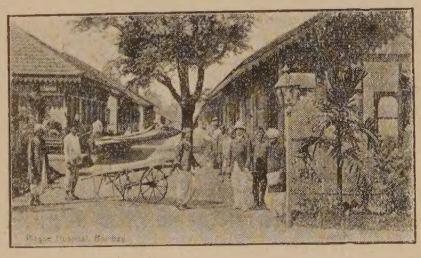
After a brief stay in Madras my itinerary led me to Poona, the recent hot-bed of bubonic plague. A few weeks preceding our arrival at Poona nearly two-thirds of the inhabitants had fled from the danger and taken up their abodes in more wholesome regions. We found the Connaught Hotel almost guestless, the Sisters at the Sassoon Hospital looked as if they had been overworked, the streets lacked the life and animation which we expected to see, and everybody was talking about a hoped-for revival of business now that the people were beginning to come back.

On reaching Bombay we found that there was still a good deal of talk about the plague there, but no one appeared to manifest any fear of it. In every part of the city we saw men carrying rat-traps which the Board of Health was supplying to the public as one of the means of arresting the disease. It is believed that the rats are the chief, if not the only carriers and that their destruction will be the destruction of the malady. As a prophylactic Haffkine's serum was being extensively used. Bombay is, in every sense of the word, an up-to-date city. Nowhere are there finer buildings or more beautiful ones. The railway station is a marvellously handsome building. The post-office, court house, city hall, and other public edifices are palatial in their magnificence. The Taj



St. George's Hospital, Bombay.

Mahal Hotel cannot be excelled anywhere. Even such market places as the Crawford Market are not to be despised as works of art. A general view of the city, from Malabar Hill shows the visitor that even in its lay out, it is quite a pretty place. It is well supplied with excellently equipped institutions of learning. The Grant Medical College will compare favorably with anything in our own country. Adjoining it is the fine, large, Jamsetjee Jeejeebhoy Hospital with accommodation for 500 patients, the Hospital for Incurables, the Dinshaw Maneckjee Petit Hospital for women and children, and the Bai Motlabai Obstetric Hospital. Besides these the city contains the Gokaldas Tejpal Hospital with accommodation for 150 patients, the Pestonji Kama



Plague Hospital.

Hosptial with 75 beds for women and children, the Allbless Obstetric Hospital, and last, though not least, St. George's Hospital. The presence of the plague in the city has brought into unusual prominence the Plague Hopital. It can accommodate from 300 to 400 patients. It is composed of a

number of one-story buildings to which patients are carried in a two-wheeled cart drawn by a couple of coolies. The stretcher is laid on the bottom of the cart, and on it the patient lies till he is ready to be transferred to the hospital cot. The cart is painted white and has a white awning over it while a blanket constitutes the covering of the patient. In most of the hospitals the Parsees have a special part allotted to them. Their sick have so many visitors that it has been found necessary to adopt this measure so as to save other patients from the annoyance.

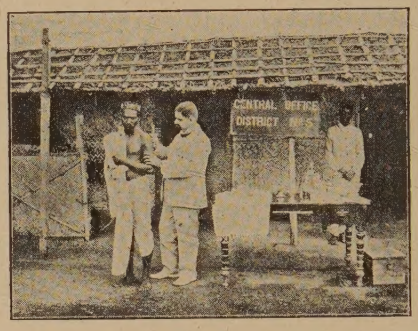
THE PARSEES.

The Parsees are the chief moneyed men of Bombay, so that their influence is very great. As they are exceedingly philanthropic and in every way public spirited and liberal they are well liked by most of the people. Their peculiar way of disposing of their dead is an object of great curiosity to tourists. The five "Towers of Silence" on Malabar Hill is one of the chief sights that they all wish to see. While it is very questionable as to whether this mode of disposing of the dead is one that is quite safe for the public no one in Bombay would think of whispering such a fact for fear of giving offense. The nude bodies of the departed are exposed on the top of these towers to the ravages of vultures. So thick are these birds around the towers that in about half an hour after exposure the bones are stripped clean of flesh. These bones are left to bleach and dry in the sun after which they are dropped down into the tower well where they are permitted to decay and where the rain washes the decayed matter through charcoal into the ground, from whence it finds its way into the sea. Antiseptic precautions are taken at every step of the proceedings except as regards the vultures. There is no way of guarding against their scattering contagion wherever they happen to go. Even when flying over people's heads they are dropping infection.

THE PLAGUE AND ITS CAUSES.

A careful study of the evidence in our possession shows us that plague is most likely an intestinal disease. In every experiment yet made the only avenue of escape for the germs that has been found is from the intestines. It is quite true that the blood is invaded in this disease just as in malaria, but this is found to be equally true in typhoid fever. While inoculation may account for some cases this is rendered unlikely by the fact that its cause is a bacillus and not a protozoa. It is much more nearly related to typhoid fever than it is to malaria, yellow fever or smallpox. The fact of its possessing a pneumonic form is, in the light of Calmette's recent experiments, rather confirmatory of its intestinal character. Calmette has shown that pneumonia and tuberculosis are imparted to animals by way of the alimentary canal, and it is a well-known fact that typhoid fever has a pneumonic form. As in typhoid and other intestinal infections, ambulatory forms are quite common, and in the discharges of these the bacillus of Kitasato and Yersin are found. General distribution of the bacilli through the system would give the septisemic form while invasion of the glands give the bubonic form.

The one most important fact that for some reason medical authorities seem inclined to



Inoculation Against Plague.

minimize, is that in every epidemic the first victims are usually keepers of grain stores, bakers, grocers, keepers of delicatessan stores and dealers in foodstuffs of various kinds. It is quite likely that rodents carry it to foodstuffs when foraging for something to eat. Their connection with the plague has long been recognized and in the description of the battle of Ebenezer, between the Israelites and the Philistines, the book of I Samuel gives us a graphic picture of an epidemic of plague in which mice figured conspicuously. Yersin has fed rats and mice with infected flesh and they have died with the disease. Their dead bodies showed the characteristic leisons and were swarming with the bacilli. Every locality in which plague flourishes has been reported as conspicuously filthy. What does this mean except that food, in some form, is left around where it should not be for the germs to feed upon? Decaying animal and vegetable matter, fecal matter, and the like are, chemically considered, neither more nor less than rejected food. No filth disease can flourish except upon food and pathogenic germs are not known to be particularly careful as regard the kind of food they will grow upon so long as it contains a supply of protein and carbohydrates. They are quite will-

ing to grow upon the food we have in our kitchens and they are equally willing to grow on that type of food we characterize as filth. As long as they remain in the filth food we are quite safe from them. It is when they get out of that by the aid of flies, wind, dirty hands, etc., that they become dangerous. Being conveyed to otherwise clean food they multiply in it, we swallow them, and then they do the rest.

Water that contains, in solution, enough food to permit of their multiplication is dangerous, but if ordinary drinking water was half as dangerous as we have been taught, the world would have been depopulated millieniums ago. The habits of the people of India, as herein described, are ample explanation for the persistence of plague among them. If they were not highly immune to it they would no doubt suffer far more than they do. The water they drink is infinitely more likely to be laden with millions of disease germ than ours is. Their food is far more subject to infection than ours. Bad as their water happens to be I am quite satisfied that even it is not bad enough to directly give them any disease. When used for culinary purposes and when employed as a cleansing agent for vessels that are to contain food, it sows the seeds that multiply in the food, to the poisoning point and in this way imparts disease. In the case of plague, inoculations may occur by bugs or fleas, as surmised, but it does not appear from the facts that this cuts any great figure in an epidemic.

Professsor Bruno Galli-Valerio, of the University of Lausanne, very clearly showed how exceedingly slight the evidence was on which Dr. Simond made his guess about the part taken by fleas. On that guess ingenuous speculations have been built that are as yet rather unsatisfactory. Dr. Nuttall, of the University of Cambridge, reports having made over 250 experiments with fleas and bugs as carriers of plague, and every experiment was a failure. In no instance was he able to get a flea or bug to impart the bacilli of plague to rats or mice. The germs were always digested in the alimenary canal of the insects. Kolle repeated the experiments of Nuttall and got the same negative results. At the Plague Hospital, in Bombay, they are inclined to favor this theory, simply because they have been baffled in trying to conceive of how the germs get from the rats to the sufferers. They are apparently unwilling to give the food theory the slightest attention. They act as if they did not want it to be true and are letting sentiment overcome judgment, a not uncommon thing for weak mortals to be guilty of.

Just now the plague is knocking at our own western door and we cannot tell how soon conditions may arise that will favor its spread. Never before has plague spread so far in this world, but happily its virulence is but slight and its victims comparatively few. Experiments show that there are conditions of food, of moisture, and of temperature that alter its virulence, and control its powers of multiplication. When these are favorable it become exceedingly dangerous and multiplies with great rapidity. During the great plague of 1361 its danger was at a maximum. Hecker tells us that 25,000,000 people died in Europe from it. In the great plague at London, in 1665, about 70,000 lives were sacrificed by its ravages.

ARTERIA MESENTERICA DISTAL—THE DISTAL MESENTERIC ARTERY.

BYRON ROBINSON, B. S., M. D.

CHICAGO.

(Continued from page 616.)

II. BRANCHES OF DISTAL MESENTERIC ARTERY.

Though the trunk of the distal mesenteric artery bifurcates in 70% of subjects and trifurcates in 30% of subjects, however, for convenience of description I shall assume that the artery bifurcates—divides into three primary divisions, viz.: (1) arteria colica sinistra; (2) arteria sigmoidea; (3) arteria hemorrhoidalis proximal.

Some 60% of anatomic text-books present bifurcation of the trunk of the distal mesenteric artery. Our dissections presented 70% of subjects with bifurcation of the trunk.

Some 25 of anatomic text-books present trifurcation of the trunk of the distal mesenteric artery. Our dissections presented 30% of subjects with trifurcation of the trunk.

Ten per cent of anatomic text-books cannot be classed as maintaining bifurcation or trifurcation of the trunk of the distal mesenteric artery and also their illustrations and descriptions frequently do not correspond.

The plan of the branches of the distal mesenteric artery may be represented by the three following tables, A, B, C.

(A) Common Trunk: (a) Proximal branch—colica sinistra; (b) distal branch—sigmoidea; proximal hemorrhoidal. Bifurcation 70.

(B) Common Trunk: (a) proximal branch—colica sinistra; (b) middle branch—sigmoidea; (c) distal branch—proximal hemorrhoidal. Trifurcation 30.

(C) Common Trunk: (a) proximal branch—colica sinistra, sigmoidea; (b) distal branch—proximal hemorrhoidal. Trifurcation 30.

1. ARTERICA COLICA SINISTRA.

The arteria colica sinistra or left colica arteria is the proximal branch of the trunk of the distal mesenteric artery.

Course.—It courses irregularly, sometimes zigzag leftward and proximalward dorsal to the peritoneum and over the ventral surface of the left kidney (see Figs. 38, 50) toward the left colon.

In its courses it emits fine branches to the adjacent tissue especially to the mesenteria peritonei and mesenteria membrana propria, particularly to mesenteric glands. The colica sinistra is embedded in a moderately strong sheath of connective tissue of ample lumen to permit marked peristalsis—hyperemia during colonic functions (sensation, peristalsis, absorption, secretion).

Branches.—In general the left colic artery trifurcates, is divided into three branches, viz.: (a) Proximal branch—ramus (anasomaticus) proximal sinistra—which anastomoses with the ramus (anastomaticus) dextra of the Riolan and Haller. (b) Medial branch—arteria transversa forming the arch of the ramus media—which anastomoses the ramus proximal to the ramus distal. (c) Distal branch ramus distal, which anastomoses the ramus media with the arteria simoidea.

Dimension.—The arteria colica sinistra is one-tenth of an inch in diameter and extends from its bifurcated trunk to the middle of the transverse colon to complete Riolan's or Haller's arch, which may include a distance of eight to twelve inches.

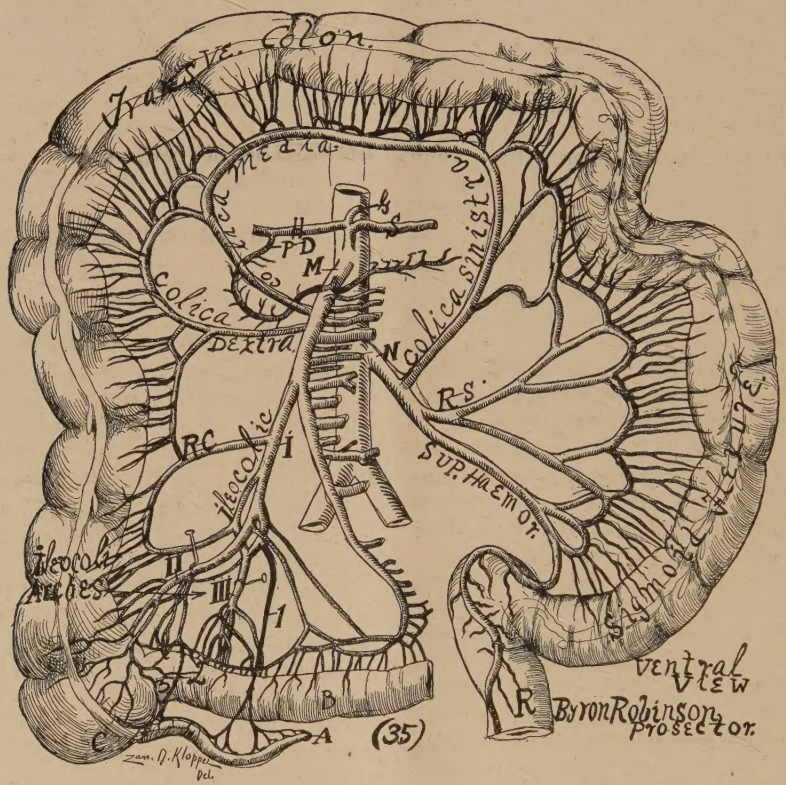


Fig. 3 (35).—I injected and dissected this specimen under formalin and Zan. D. Klopper sketched it while it lay extended on a plane surface. It presents the distal mesenteric artery as to I, trunk; II, branches; III, arches; IV, "straight terminal vessel." The trunk bifurcates and originates on a level with the bifurcation of it. Proximal mesenteric artery (where it enters into the formation of the "ileocolic circle"—a constant structure with a constant location. The proximal branch of the trunk forms the arteria colica sinistra, which anastomoses to form the Riolan-Haller arch. The distal branch of the trunk bifurcates to produce the arteria sigmoidea and arteria hemorrhoidalis distal.

The branches and arches of the distal mesenteric artery are in this figure evident in number, form, dimension (length and diameter), relation, location, characteristic and topography. The significant "straight terminal vessel" is amply manifest for the surgeon. It might appear in the illustration that there is no "straight terminal vessel" along the left colon, however, if the mesocolic arch and the left colon be drawn asunder the "straight vessel" will be manifest. The mesocolic one of trunk, branches, arches and "straight vessel" of the distal mesenteric artery are of significant interest to the physician.

ARCHES OF THE ARTERIA COLICA SINISTRA.

In 17 subjects the average number of arches in the arteria colica sinistra was 9, the minimum was 3, the maximum was 20.

The arches of the left colic artery are located between the left half of the transverse colon and point where the left mesocolon turns rightward to cross the psoas muscle.

The arches of the left colic artery occupy

the renal region. In some subjects an arch will almost completely surround the kidney (see Figs, 38, 51, 50).

The arches project the peritoneum while it is depressed in the center of the arch producing what might be termed arterial fields. W. Waldeyer, the prince of applied anatomy in German, has written excellent suggestions on what he terms the "Arterial Field of the Abdominal Cavity." The arches of the left colic artery occupy the left "renal field." The left arch resembles those of the proximal colonic segments, especially those of the right colon in dimension, form, diameter, of anastomatic vessels and relation to colon. They are characterized by multiplicity, by maximum and minimum dimension, by irregularity of form, by non-compact anastomosis, by prominent diameter of anastomatic vessel, by marked proximity to the left colonic border, by one to three series. In some subjects(32, 38, 35) the arches of the left colic artery not only lies in contact with the colonic borders but may lie on the ventral surface of the colon.

"VAS COLI TERMINALE RECTUM."

The "straight terminal vessel" of the left colon is perhaps slightly less in length than that of the proximal colonic segments. It is, however, of ample length ($\frac{1}{2}$ to 1 inch) for ligation or better clamping, during resection, lateral anastomosis or circular colorrhaphy without molesting the left mesocolic arches which are of significant importance on account of their engagement in the formation of Riolan's and Haller's arch—the longest vascular arch in the body (see Figs. 35, 36, 48, 44, 43, 39). The Riolan-Haller arch may measure 18 inches The straight terminal vessels of the left colic artery is located between the mesocolic arches and the right border of theleft colon.

The arteria colica sinistra possesses two kinds of "straight vessel," viz.: (a) the long straight vessel, which extends beyond the colon to supply the appendix epiploicus; (b) the "short straight vessel," which supplies dorsal and ventral surface of the left colon only.

2. ARTERIA SIGMOIDEA.

In 19 subjects the average was four sigmoid arteries. The maximum number was nine. The minimum number was two. Some latitude of personal judgment and equation must be considered.

Origin.—The sigmoid artery may have three distinct origins, viz.: (a) from the distal branch of the trunk of the arteria mesenteric distal, i.e., from the proximal hemorrhoidal artery, (b) directly from the trunk of the arteria mesenterica distal, i.e., where the trunk trifurcates; (c) from the proximal branch of the trunk of the distal mesenteric i.e., from the arteria colica sinistra. When the sigmoid artery arises from the distal or proximal branch of the trunk it occurs at a short distance from the bifurcation. It is the middle branch—ramus media—of the arteria mesenterica distal. There may be several sigmoid arteries usually 4—1 to 9 see Fig. (23).

A sigmoid artery may arise from the proximal and distal primary branch of the trunk of the distal mesenteric artery in the same individual (see Figs. 32, 28, 26).

Course.—The sigmoid artery courses irregularly distalward and leftward between the mesosigmoid blades, to supply the sigmoid flexure. It passes ventral to the psoas muscle and ureter. It forms between the mesosigmoid blades an uncertain number of compact anastomatic arches. The sigmoid artery anastomoses proximalward with the arteria colica sinistra and distalward with the arteria hemorrhoidalis proximal. In its course the sigmoid artery is ensheathed inpowerful cylinders of connective tissue of ample lumen to allow function, especially peristalsis. The mesenterii membrana propria in which the sigmoid artery is imbedded is among the thickest and strongest of mesenteries, and generally further hypertrophied by mesosigmoiditis due to psoas trauma.

Dimensions.—The sigmoid artery is one-tenth of an inch in diameter, and from two to four inches in length.

Arches of the Sigmoid Artery.—In 18 subjects the average number of sigmoid arches was 10, maximum 16, minimum 5. The arches of the sigmoid artery are characterized by multiplicity, limitation of dimension, prominent diameter of anastomatic vessels, solid and compact anastomoses, irregularity of form, proximity to sigmoid border, maximum connective tissue sheathes a serial order of two with occasionally three.

The arches of the sigmoid artery resembles in form and dimension the iloceolic arches or the second series of the mesenteron arches. In general there are one to three sigmoid arches of primary order and maximum dimension, the remaining sigmoid arches are of secondary order and minimum dimension.

"*Vas Sigmoidea Terminale Rectum.*"—The "straight terminal vessel of the sigmoid" may be among the smallest "straight terminal vessel of the intestine." Its length ($\frac{1}{2}$ to $1\frac{1}{2}$ inches) is, however, ample for ligature or clamp during sigmoid surgical procedures, without molesting the "sigmoid arches" and thus avoiding the jeopardy of gangrene or

sigmoid ulceration from disturbing its blood supply.

The "vas sigmoidea terminale rectum" is ensconced in thick powerful sheaths of connective tissue which is frequently enhanced by sigmoiditis due to psoas trauma. Perhaps four to six straight terminal sigmoid vessels may occur to the inch, abundantly supplying the sigmoid.

The straight terminal vessel of the sig-

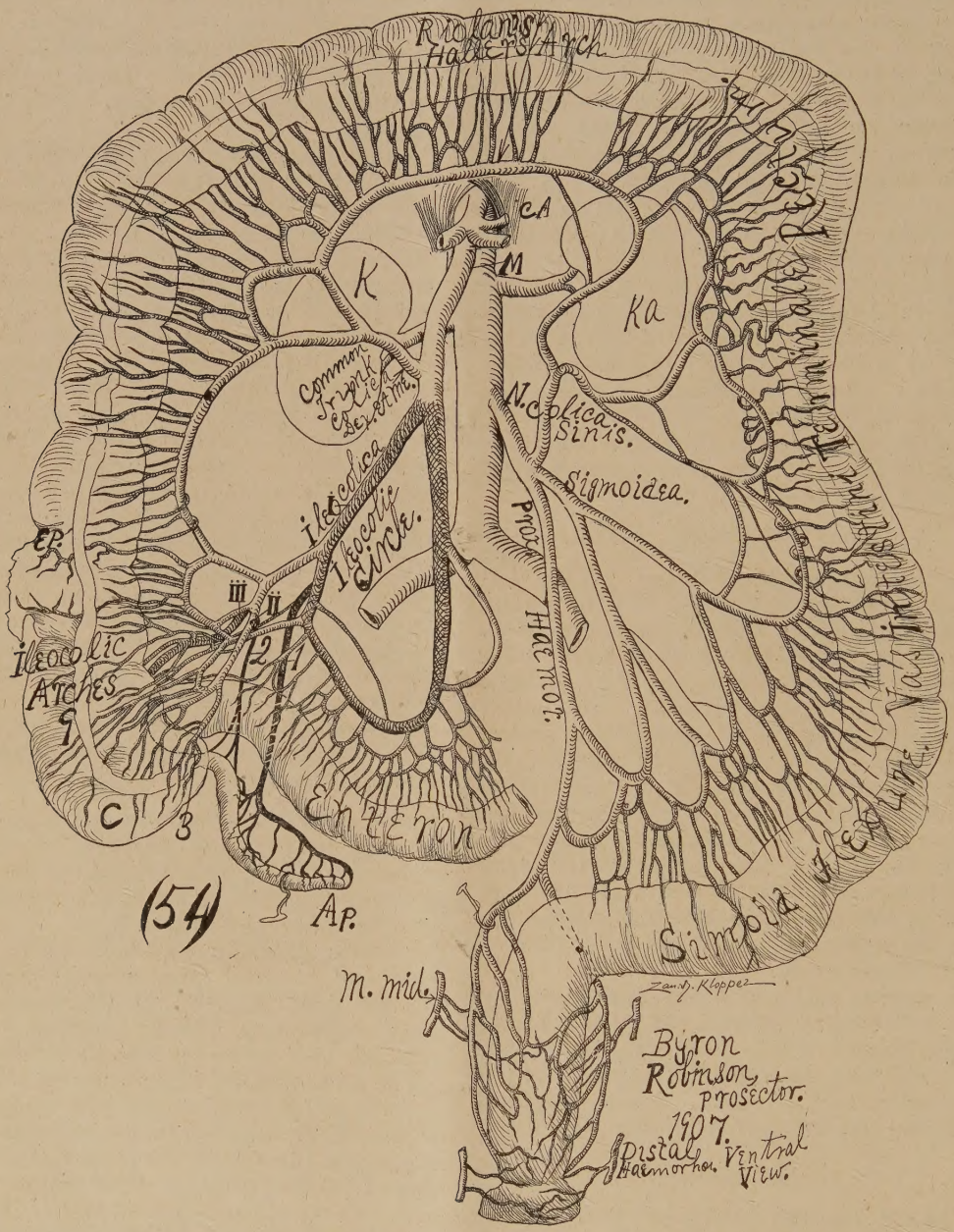


Fig. 4 (54).—I injected and dissected this specimen under alcohol. It was sketched as a model while lying on a plane surface by Zan D Klopper. It presents the trunk, branches, arches and "straight terminal vessel" of the distal mesenteric artery. The trunk bifurcates, resulting in the arteria colica sinistra, arteria sigmoidea and arteria hemorrhoidalis proximal. Observe the branches and arches as to number, form, dimension (length and diameter), location, relation, characteristic and topography. Note that the "straight terminal vessel" present ample length (1 to 2 inches) for ligation or clamping without damage to mesocolic arch during resection, lateral anastomosis, circular colorrhaphy. The mesocolic zone of trunk, branch, arch and "straight terminal vessel" is evident in this illustration. The origin of the trunk of the distal mesenteric artery is in the region of the bifurcation of the trunk of the proximal mesenteric artery where it engages in the formation of the "ileocolic circle." The Riolan Haller arch is some 15 inches in length. The arteria colica dextra and transversa possess a common trunk and there is no arteria colica transversa accessoria or Waldeyer artery. The bilaterally duplicate major mesocolic circles or the four major mesocolic arterial fields are evident, which practically refer to the renal fields. The resemblance of the mesosigmoid arches to the "mesocolic arches" is apparent in this illustration.

moid in dimension (length and diameter) and number lies midway between those of the enteron and colon. They pass to the dorsal and ventral wall of the sigmoid. There are two kinds of "straight terminal vessels" supplying the sigmoid, viz., a "long straight vessel," which passes from the sigmoid arch to the appendix epiploicus and a "short straight vessel" which passes to the ventral and dorsal surface of the sigmoid and does not supply the appendix epiploicus. The "long straight vessel" in the sigmoid averages about an inch in distance from each other.

A powerful crushing clamp will arrest the hemorrhage in the "straight vessel" in two minutes.

3. ARTERIA HEMORRHOIDALIS PROXIMAL.

The proximal hemorrhoidalis artery is the distal branch of the distal mesenteric artery of which it appears as a direct continuation.

Course.—It courses distalward dorsal to the peritoneum intimately adjacent to distal abdominal aorta, ventral to the left common iliac artery and ureter on the left side of the promontorium, on the left ventral surface of the sacrum between the blades of

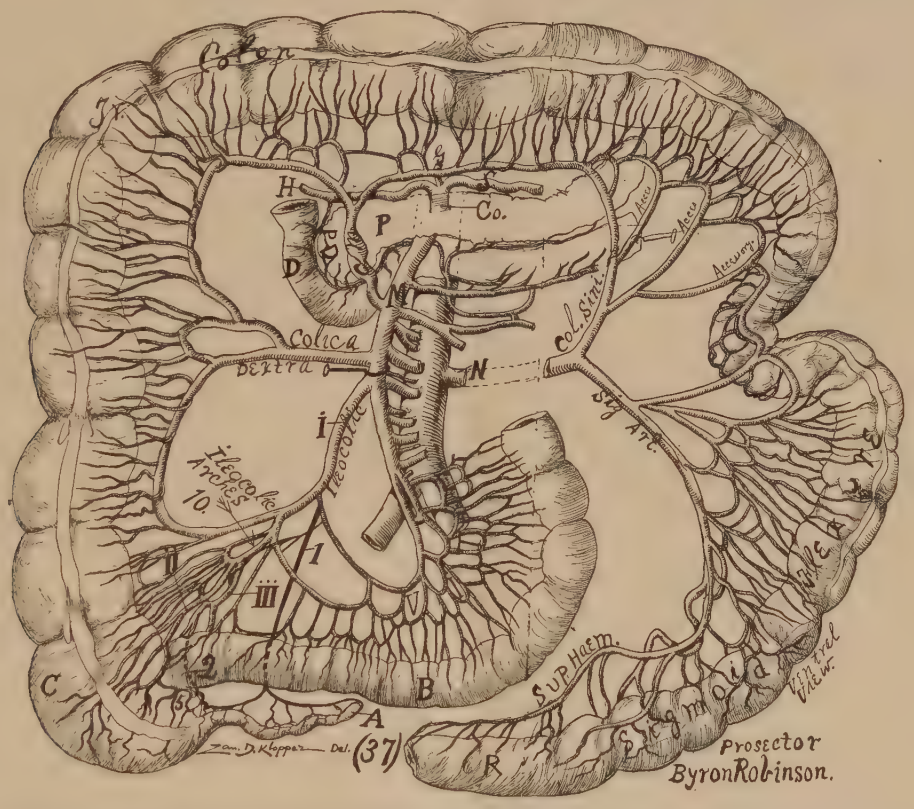


Fig. 5 (37).—I injected and dissected this specimen, which was sketched by Zan D. Klopper as a model while lying on a plane surface. It presents the trunk, branches, arches and "straight terminal vessel" of the distal mesenteric artery. The trunk, 1 inch in length, bifurcates in (a) proximal branch (arteria colica sinistra, which completes the Riolan-Haller arch); (b) distal branch, which bifurcates into arteria sigmoidea and arteria hemorrhoidalis proximal. The third branch of the distal mesenteric artery—colica sinistra, sigmoidea, proximal hemorrhoidal—solidly and compactly anastomose. The "straight terminal vessel" of ample length (1 to 2 inches) for ligature or clamp without damaging the "mesocolic arches" is evident. The trunk originates proximal to the bifurcation of the proximal mesenteric artery (where it engages in the formation of the "mesocolic circle," a constant structure with a constant location, and in general originates the main appendicular artery. Observe the branches and arches of the distal mesenteric as to number, form, dimension (length and diameter), location, relation, characteristic and topography. The mesocolic zone of trunk, arch and "straight terminal vessel" is significant to medicine and surgery. The resemblance of mesosigmoid and "ileocolic arches" is apparent. The bilaterally duplicate major mesocolic circles are manifest. They are the arterial fields of the abdomen. A Waldeyer's artery divides the giant Riolan-Haller arch (erroneously marked in the figure as colica media).

In order to expose the "straight vessel" of the sigmoid it must first be freed, liberated from its mesosigmoid adhesions, due to the psoas trauma, which occur in about 80 of adults when the "straight vessel" may be attacked from the right or left side of the mesosigmoid.

the mesosigmoid and mesorectum and on the dorsal surface of the rectum whence it bifurcates and anastomoses with the arterial hemorrhoidalis media (from the ventral division of internal iliac) and arteria hemorrhoidalis distal (from the internal pubic) some six inches proximal to the anus the

proximal hemorrhoidal artery bifurcates and each branch courses along the lateral border of the sigmoid and rectum. About five inches proximal to the anus each of these lateral branches subdivide and bifurcate into three or four branches which pierce the rectal muscular coat three inches from anus.

These branches located at regular intervals in the lateral wall pass distalward between the rectal muscularis and mucosa to the anus. At the distal end of the rectum the proximal hemorrhoidal atrery unites in loops and anastomoses with the arteria hemorrhoidalis media and distal. The proximal hemorrohidal artery emits no rightward branch from its right side (except fine threads for the nourishment of the peritoneum, membrana mesenteric propria and meseneteric glands).

In the majority of subjects the arteria sigmoidea is a branch of the arteria hemorrhoidalis proximal.

Dimension.—The diameter of the proximal hemorrhoidal artery is one-eighth of an inch and its length is twelve inches.

Arches of the Proximal Hemorrhoidal Artery.—In 20 subjects the average number of the hemorrhoidal arches was 5, the maximum was 9. The minimum was 2. The arches of the hemorrhoidal arteries are formed by the anastomosis of its branches with those of the sigmoid artery.

When the proximal hemorrhoidal artery ceases to produce arches it bifurcates about five inches proximal to the anus, and attends the distal end of the sigmoid and rectum. The arches of the distal hemorrhoidal artery are characterized by limited number, of the maximum and minimum dimension, solid and compact anastomosis, significant diameter to the anastomiatic artery and proximity to the sigmoid border.

There is frequently one arch of maximum dimension (see Figs. 26, 35, 28, 32, 43, 39, 42, 41, 44, 47) accompanied by several of minor dimension. In general there is in the arches of the proximal hemorrhoidal artery one of maximum dimension and several of minor dimension.

Vas Proximal Hemorrhoidalis Terminale Rectum or "straight terminal vessel" of the proximal hemorrhoidal artery are distinct, of ample length (½ to 1 inch) for ligature or clamp without molesting the arches of the proximal hemorrhoidal artery. The "straight vessel" emitted from the arches of the proximal hemorrhoidal artery are less in number and greater in dimension than those of the sigmoid artery. The proximal hemorrhoidal artery arches average half the number of those of the sigmoid and left colic arteries. Between the last arch of the proximal hemorrhoidal artery and its primary bifurcation there is a space free from the large "straight vessel." The proximal hemorrhoidal artery at its distal end possess only one kind of "straight vessel" as there are no appendicae epiploicae requiring a long and short "straight vessel."

[TO BE CONTINUED.]

COTARNINE PHTHALATE AS UTERINE HEMOSTATIC.

O. HESSEL, M. D.

NEW YORK.

THE oldest and best known drug applicable in hemorrhage from the uterus is undoubtedly ergot. Invaluable as this remedy may be after confinements and in numerous other conditions of the female generative organs, many disadvantages are experienced while administering it, which made the discovery of another hemostatic imperative. To begin with, the composition of the drug is by no means constant. The principles contained in ergot are numerous and not yet fully understood and their percentage varies with the age and the care taken in preserving the crude drug. Certain of the principles are responsible for the untoward symptoms occasionally observed; thus, according to Kobert, the much-feared gangrene is caused by sphacelinic acid. The market has been flooded with preparations which are supposed to represent only the active ingredients, but as yet, no uniformity of action has been obtained. Owing to the fact that the hemostasis induced by ergot and its preparations depends chiefly upon contraction of the uterine muscle, the drug will of necessity be contraindicated in many conditions, such as during pregnancy, in uterine colic and dysmenorrhea. There are reasons, too, why ergot should not be given for a protracted period.

Only a few words are necessary concerning other hemostatics, which have from time to time been recommended to replace ergot and which are supposed to be free from the disagreeable after-effects of this drug, or which can be employed with impunity where ergot is not admissible. Gossypium is similar in action to ergot, but is generally conceded to be much weaker and less reliable. Others, such as adrenalin and the preparation of hydrastis, cause hemostasis by contraction of the capillaries. Adrenalin is especially valuable in bleeding if applied locally, as in bleeding carcinoma; its action is very rapid but of short duration and, after the internal use

of even small doses, severe collapse has been seen. The extract prepared from hydrastis and better still, the active principle, hydrastinine, have given very satisfactory results. The price of these drugs is high and often the general rise of blood-pressure which follows, manifests itself in slowing of the pulse and acceleration of he breathing. The taste is very bitter and disagreeable, and after prolonged use, the patients complain of loss of appetite and gastro-intestinal disurbances.

Several years ago it was discovered that the salts of cotarnine, an alkaloid prepared from the opium alkaloid narcotine, possessed hemostatic properties of a high degree, which rendered them of especial value in bleeding from the female genital organs. The salts most usually employed are the hydrochlorate (stypticin) and the phthalate (Styptol). Owing to the fact that phthalic acid is also hemostatic, the latter salt is at present considered to be the superior of the two.

Styptol is a yellowish, crystalline powder, melting at 113 C. and corresponding to the chemical formula $(C_{12}H_{14}No_3)_2C_8H_6O_4$. Styptol therefore possesses the physiological action of both cotarnine and phthalic acid. Cotarnine also resembles narcotine, from which it is prepared in that it shows a decided narcotic action. No general rise of blood-pressure is seen after the administration of styptol, hence the hemostasis does not depend upon stimulation of central organs. It seems that the drug possesses a selective action upon the blood-vessels of certain organs, notably those contained in the pelvis, while in other hemorrhages, such as those dependent upon disease in the stomach or nose, it is of less value. It follows that the nerve plexuses of the genito-urinary organs are particularly susceptible to the action of the drug. After internal administration, the drug passes into the circulation without however causing a general rise of blood-pressure.

Vieth, Abel and Jacoby, as well as others have demonstrated that the drug also diminishes the irritability of the uterine nerves. Mohr has proven this fact experimentally. After larger doses, this sedative action will also extend to the cerebrum and sleep will be the result.

The phthalate of cotarnine seems to be the drug par excellence in dysmenorrhea. No other drug combines sedative and hemostatic properties to such a degree as to be of real value in an affection which has hitherto been the bugbear of the general practitioner. Relatively large doses may be given since the toxicity is very slight. Likewise there is no contraindication to a prolonged use of the drug. It is particularly indicated in the following morbid conditions:

1. In severe menstrual bleeding of unmarried women and women who have not borne children, where there are no evident pathological changes.
2. In the bleeding of the climacteric period.
3. In hemorrhage during pregnancy.
4. In hemorrhage due to fibroids.
5. In hemorrhage due to adnexal disease or parametritis. The action here will always remain uncertain since the proper treatment is removal of the cause.
6. In hemorrhage due to inoperable carcinoma. Here the drug may be applied locally.
7. In dysmenorrhea.

The literature on cotarnine phthalate is already very extensive and most reports are unanimous in praising the good qualities of the drug. Thus, C. A. v. Ramdohr (N. Y. Med. Jour., March 9, 1907) has obtained relief in five cases of bleeding out of six, after the usual remedies had failed. It never interfered with digestion or gave rise to bad after-effects, and is therefore indicated in selected cases where operation is refued. K. Abel (Berl. klin. Woch., No. 34, 1905) believes that in cotarnine phthalate we have discovered a hemostatic which surpasses all former hemostatics employed in gynecology, provided the indications and dosage are correct. The pronounced sedative action is particularly commented upon. In bleeding carcinoma, he applies the drug locally to the neoplasm. M. Hadfield-Jones (Folia Therapeutica, Jan., 1907) finds that styptol is principally useful where there is an unhealthy condition of the uterine mucosa, and that it is of little value in fibroid, cancer or other neoplasm and during pregnancy. Two and a half to three grains may be considered the minimum dose and may be repeated three to four times in twenty-four hours. The drugs should not be withheld during menstruation and a sedative action is unmistakable. S. J. Aarons (Brit. Gynec. Jour., Feb., 1907) has given two grains four times a day with very gratifying results, and in only two instances did it fail to check the bleeding. Burckhardt (Reichs-Medicinal-Anzeiger, 1906, No. 6) has prescribed stypol in endometritis partly combined which chronic metritis; in menorrhagia without palpable changes in the womb or its appendages, and in fibroids. All his cases show without doubt that the action of styptol is a most favorable one. Even where curettement only gave temporary relief, rapid improvement followed and where the drug was discontinued for a short period, the renewed hemorrhage yielded just as readily. Max Jacoby (Die Therapie d. Gegenw., June,

1806) finds that styptol acts as sedative in idiopathic dysmenorrhea and usually brings about a permanent cure. The quieting effect is hardly ever absent if sufficiently large doses be given. Toxic symptoms have not yet been observed. In dysmenorrhea, it is best to give the drug several days before the appearance of blood and if anemia is present, this should be treated in the interval. R. Kaufmann (Medical Press and Circ., Sept. 20, 1905) has tried the drug in hemorrhage due to gonorrheal urethritis and cystitis and in hemorrhage in cases of hypertrophy of the prostate gland.

Similar satisfactory results were also obtained in hemorrhage due to tubercular cystitis. An interesting experimental research was made by Möhr (Therapy d. Gegenw., 1905, No. 8). A rabbit at the end of pregnancy was anesthetized with urethane and then a laparotomy performed with all precautions. Half an hour later, a hypodermic injection of 15 cgms. of styptol was given. Half an hour later, weak peristaltic movements appeared in several intestinal loops; the uterus and its appendages, however remained perfectly quiet, although the ability of the womb to contract was proven by direct faradic stimulation of the muscle. The next experiments were made upon roosters. A number of animals were fed with fairly large doses for several weeks. The animals remained in perfect health and the tips of the comb never became gangrenous as with ergot.

Many more author might be quoted, but nearly all are unanimous in praising the good effect of the cotarnine phthalate. The following cases may be mentioned as further evidence:

I. Mrs. T., 28 years old, has never been pregnant. The patient is very anemic, frequently suffers from attacks of articular rheumatism and has a blowing murmur over the site of the aortic valves. The uterus is enlarged and slightly retroverted and the left ovary and tube are diseased. At every menstrual period, the loss of blood is really alarming. Owing to the condition of the heart and the anemia, removal of the diseased appendages was not considered advisable. A curettage performed under gas narcosis brought absolutely no relief. The patient was then put upon cotarnine phthalate, three-fourths grain three times a day one week before the expected menses, the dose to be doubled with the appearance of the blood. In the interval the patient was fed up and iron and heart tonics were administered. Though the case was a most severe test for the drug, since the bleeding was secondary, due to the endocarditis and the adnexal disease, an improvement was unmistakable. She now loses only a moderate amount of blood with every menstrual epoch and is rapidly improving. Ergot and hydrastis had previously been tried without marked result.

II. Miss T., 37 years old, school teacher. The patient is anemic, has a slight tuberculous focus in one apex and suffers from gastric and intestinal catarrh. During every menstruation, she has intense colicky pain and loses considerable blood. The uterus is slightly retroflected, the appendages normal. An operation is refused. Styptol was given as above with the result that she is able to be up and about during the following period. Iron seems to be more effective now than before, and the hemoglobin has increased from 60 to 70 per cent in two months.

III. Mrs. R., 32 years old, had a miscarriage two years ago, after which a curettement was performed. The patient is extremely nervous and suffered excruciating pains with every menstruation. The relief following a second curettage lasted about four months, after which the pain returned in its original severity. Examination merely showed a slightly enlarged uterus moderately turned backward. Styptol as given in doses of three-fourths grain three times a day. The next menstruation was still accompanied by considerable pain and the patient became much discouraged. The administration was then begun two weeks before the next period and the dose was doubled during the period. A decided effect was now unmistakable and the patient felt better with every succeeding period.

IV. Miss B., 17 years old. The patient is on her feet all day and is very anemic. With every menstrual period, she is obliged to stay away from business owing to severe hemorrhage and pain. An examination is refused. Iron and other tonics, hydrastis and viburnum have very little effect. The patient has now taken styptol at the proper time for six months; she feels much stronger than before, and no longer dreads her period.

In all these four cases styptol was of decided service. It can be particularly recommended in the dysmenorrhea so common in unmarried girls, where there are but slight change in the sexual organs and where a curettage, or perhaps even an examination is refused. In cases with narrow cervix, a preliminary dilatation is of course desirable. The drug may be regarded as almost a specific in dysmenorrhea, while in other pathological conditions, which cannot be treated radically, it is a better palliative than the uterine hemostatics. Bad after-effects were never seen, and indeed the animal experiments prove that the drug possesses only a very light degree of toxicity.

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OFFICIAL TRANSACTIONS.

ACUTE PANCREATITIS*

W. H. COOK, M. D.

ST. LOUIS.

THE case I am reporting came to the hospital presenting a peculiar grouping of symptoms, in a way resembling gastric ulcer with perforation, but on close examination this conclusion could not be verified, and as the case progressed the symptoms became more intricate and confusing. It was thought that the society would be interested in the general progress and termination of the disease. A brief history of the case and the post-mortem findings will be presented for your consideration:

The patient, G. P. a colored man, entered the hospital on the 22d of last month, giving the following history and presenting symptoms and conditions to be mentioned.

The family history of this man is good with the exception of one sister, who is in an insane asylum.

This patient was a well built man, a mulatto, 40 years of age; a stationary fireman; a hard whiskey drinker; and gave a history of gonorrhea and of syphilis. Patient enjoyed good health till five years ago. Since then he has had a complaint, the symptoms indicated disease of the digestive system. Diarrhea, vomiting and cramping pains in epigastrium were constant and marked symptoms. This condition had its beginning five years ago; has been worse in last eighteen months, and in last four months patient has hardly been able to do a whole week's work at a time without a lay off. For last two weeks before onset of final trouble he ate very little food—meantime drinking hard—and almost immediately vomited what he did eat. During these two weeks, as well as previously, he complained of a "knot" in the epigastrium, and said if this were only cut out he felt as if he would be all right.

On Saturday morning, the day before he came to the hospital, the patient was up at 5 o'clock and ordered breakfast; while this was being prepared he went out and got a drink of whiskey. On returning he said he was very sick and wanted no breakfast. There upon he went to bed and complained of severe pain in the epigastrium. He had incessant vomiting, and a pronounced hiccough that continued till 5 a.m. the next day and then stopped; his body was wet with a copious cold perspiration. The patient was sent to the hospital for operation.

When he reached the hospital he was in a state of rather profound collapse; radial pulse was practically imperceptible, drops of perspiration stood on the forehead, head and extremities were cold and moist, while the trunk was hot; the respiration was accelerated with some dyspnea; there was an expression of anxiety on the face; face was pale, sensorium clear. The pulse rate was 140, respiration 38, and temperature 103 by the rectum. The patient vomited water and milk as soon as taken. He complained of some pain in the epigastrium at a point just below the ensiform cartilage and downwards and to the left. Just beneath the ensiform cartilage there was an area of tenderness the size of a fifty-cent piece, the chief seat of his pains. The abdominal muscles showed no rigidity, and there was some little tympany over the abdomen.

On physical examination the head and chest showed nothing abnormal. The abdomen showed nothing more than slight tenderness in epigastrium, no rigidity, and only slight tympany.

On examination of the blood always showed a leucocytosis around 28,000. The urine was very small in amount, of sp. gr. 1022, brown in color, of acid reaction, and opaque; it contained albumen, hemoglobin, a few erythrocytes and fine granular casts, no sugar nor indican and an abundance of leucocytes. Biliary acids and pigment were present.

The progress of the disease was a peculiar one. The pulse was always imperceptible at the wrist except for a few hours while under the influence of cardiac stimulation. Its rate was pretty constant, varying from 120 to 140. The respirations were always accelerated, being about 38 till few hours before

*Read before the meeting of October 17, 1907.

death, when the rate rose to 48. The temperature was 102.8 by the rectum when patient was admitted; it fell gradually until the evening of the fourth day of the disease, when it was a little below normal, 98 by the rectum; thence it rose till it was 101.6 one hour before death. On taking food and drink patient showed a tendency to vomit at all times.

The bowels moved normally in response to catharsis.

Urine was always scanty and had to be removed by catheter. Total quantity for the four days the patient was in the hospital was 240 cc.

At first there was an area of tenderness in epigastrium, but in few hours he complained of no pain anywhere.

When patient was first seen the sensorium was clear and he was quiet. On morning of fourth day a slight delirium was noticed and no tremor. Before night the delirium was marked and patient had to be restrained in bed. On next day tremor was marked and in some respects the case looked very much like one of delirium tremens. This condition continued till the end.

At first there was very little if any abnormal rigidity of the abdominal muscles. On morning of the fourth day there was some rigidity in epigastrium. On morning of the fifth day considerable rigidity was present above the umbilicus.

There was no icterus at any time.

Repeated examinations revealed no other physical findings.

Death came suddenly in the afternoon of the fifth day of the disease. After death considerable blood passed from the rectum, none had passed previously.

The post-mortem findings are instructive. The entire lesser sac of the peritoneum was filled with a spongy dry blood clot. The contiguous loop of small intestine was covered with a fibrinous exudate. There was no other evidence of peritonitis. Small amounts of cloudy straw-colored fluid were found in dependent points.

The thoracic cavity with the contained viscera together with the spleen, mesenteric lymph nodes, intestines, and stomach were all normal.

On removing the intestines a subperitoneal hemorrhage, more marked on the left, was visible, extending around the kidney deep into the substance of the mesentery. This extended upward completely filling the lesser sac and surrounding the pancreas. The pancreas was found to be the seat of a diffuse process most marked in the body, and least so in the tail, the top of which appeared normal. On section the surface was mottled due to rather softened opaque white areas. All efforts to trace out pancreatic ducts were unsuccessful.

The liver was very much enlarged and pale.

There were no stones in the gall-bladder; the bile was dark green, very viscus and granular. No bile had extended into substance of the pancreas.

The kidneys were enlarged.

The bladder was negative.

The aorta was negative.

No pus was found anywhere.

The pancreatic secretion had flowed into the peritoneal cavity.

The microscopical findings are important. The chief changes noted are areas of autodigestion of the pancreas, which take a deep red stain with eosin. There is also some fat necrosis of the pancreas. There is a slight leucocytic infiltration about some of the pancreatic ducts, which ducts contain leucocytes, fibrin and cell debris. No other evidence of inflammation is noted in the pancreas.

The liver shows a very marked fatty change.

DISCUSSION.

Dr. John McH. Dean.—A point that might be brought out in this case is the examination of the stool. In these cases where no pancreatic juice flows into the intestine we find a fatty stool. The outcome of such cases is generally fatal. The question is whether anything could have been done for the patient by operation. Could this have originated in the blood vessels of the pancreas or was it possibly of a syphilitic nature? The case is certainly interesting and instructive.

Dr. C. H. Shutt.—At post-mortem examination the clots were found formed and had, apparently, existed for several days. Organization had begun in parts. I examined the patient several times, and the picture he presented when he entered the hospital was peculiar and remained so to the end. He entered the hospital with a diagnosis of perforation of gastric ulcer. He had been vomiting for more than a year, and it appeared that this was due to a condition of the liver brought about by alcoholism. The vomitus during his acute attack was not characteristic of pancreatitis at any time, resembling more that of a chronic gastritis. During the last few days the sclera were tinged slightly, but general icterus was absent throughout. When the diagnosis of perforation of gastric ulcer could not be confirmed, other conditions in the upper abdominal region, which might present symptoms similar to those which the patient gave, were thought of. The profound depression was that of a person suffering from an acute process. The leucocyte

count confirmed this conclusion. Every effort was made that would lead to the discovery of an autointoxication. When he first came to the hospital, acute pancreatitis was considered, and the patient was closely examined for this condition, but the symptoms were confusing and ill-defined. The stools were never characteristic. They were of a dark color, and at the very last, there was a slight amount of blood. He had an acute suppression of urine, which continued throughout. It was only in the last two days that it was possible to make a diagnosis of acute pancreatitis, but at that time his condition was such that an operation was not attempted, he being practically moribund after he entered the hospital.

Dr. George Homan.—At what time was it supposed that the blood was discharged into the peritoneal cavity?

Dr. Shutt.—At the post-mortem examination the clots around the pancreas had apparently existed for several days. The clots were firm.

Dr. Freund.—During my service here a white man entered the hospital; he had been on a protracted spree and was thoroughly under the influence of liquor when admitted. He came in about 5 o'clock, and was considered an ordinary alcoholic. The next morning he had pain in the left epigastrium and showed that he was overwhelmed by some toxic product. He had the fear of impending death. He had always been an alcoholic. His temperature was subnormal. A pancreatitis was finally decided upon, but the patient was too overwhelmed by the toxines to stand an operation. Post-mortem showed a dirty sero-purulent fluid surrounding the pancreas from tail to head and there were hemorrhages throughout the pancreas, but there was no peritonitis.

Dr. M. J. Lippe.—The diagnosis of surgical diseases in the right upper quadrant of the belly is always fraught with difficulty. We all know how difficult it is to make out the condition even in gall bladder disease. It is only in the last few years that these cases of pancreatitis have been diagnosed during the life of the patient. The frequence of cholelithiasis has been quite noticeable in these cases. I do not recall whether Dr. Cook stated that an examination of the bile ducts had been made. It is most important that the diagnosis of this condition be made during the life of the patient, if possible, but a positive diagnosis is almost impossible.

The President.—I think we have not differentiated between the acute and the chronic variety. The symptoms are not the same. In the chronic variety the pain is of a boring nature, along the spinal column, extending often to the shoulder blade, but may be differentiated from gall bladder pain often by palpation. When the gall bladder contains pus or a number of stones, pressure in that locality elicits pain. Chronic pancreatitis is usually associated with disease of the gall bladder, and it is these cases that are so favorable for operation. We have operated on these cases several times. When the gall bladder is drained there is a marked improvement in the patient's condition. The pain is relieved after draining the gall bladder. I have seen cases in which the tumor after operation was greatly reduced. In one case at the first operation the pancreas might have been mistaken for a carcinoma, it was hard and nodular. At a later operation for hernia the pancreas was found to be of normal consistency and size. In acute pancreatitis the patient is in a very toxic condition, and it may be too late for operation when the diagnosis is made. If we find an acute toxic condition with pain in the epigastrium and there is a probability of pancreatitis the patient should be operated upon. I have found in looking up the literature that a few patients have been saved by drainage, and unless we do drain away the toxic material the condition is a fatal one. The fat in the stools is an accompaniment of the chronic rather than of the acute form.

Dr. Lippe.—Do you regard the diagnosis as easy? And in these acute cases is not the lividity of the face marked?

The President.—I do not recall that. My impresion was that there was no lividity. The diagnosis is a very difficult thing to make at time, and we often come to the diagnosis by a process of exclusion.

A CASE OF PREGNANCY, COMPLICATED BY PYONEPHRITIS DUE TO PRESSURE IN URETER.

F. F. ESSELBRUEGGE, M. D.

ST. LOUIS.

The case which I wish to report to you this evening is interesting from the fact that the pathological condition was not recognized clinically, and in that, as far as have I learned, few similar cases are on record.

The patient, M. S., is a white female, age 18; occupation domestic. Entered hospital September 2, 1907, with permit diagnosis of relapse of typhoid fever.

Upon examination after patient had entered the division found following condition: Having a decided rigor, lips pale and cyanotic. Extremities cold; pulse 152; respiration 26; temperature 105 deg; pulse thready; respiration regular, costal breathing; abdomen distended and tympanitic. In lower portion of abdomen a visible swelling over which can be elicited dull note on percussion. Mass found to be firm, somewhat tender, movable from side to side, smooth and rounded, extending across midline occupying more of the right than the left lower quadrant. Left lower limb flexed at knee and hip joint. Thigh is tender and quite painful when manipulated, pain referred to hip joint region. Muscular rigidity pronounced. Seems capable of extending thigh with less pain than flexing. No heat, redness or tumor about limbs. Patient drowsy, apathetic, evinces signs of pain only when left thigh is moved.

History of Present Trouble.—States she has been sick in bed for past four weeks, having fever, which the attending physician told her was typhoid. This fever started with chills, headache, anorexia, vomiting and general malaise. No definite data obtainable; answers questions with hesitation and often contradictory statements. Portrays very little interest in all that is going on about her. Informed us, however, that menstruation was suspended for past six or seven periods, and that she had indulged in sexual intercourse at times during the past two years. Thinks she had the pain in left thigh for about a week. The pain is more or less constant and a dull ache becoming a sharp intense pain when thigh is moved and felt in the region of hip joint extending from there downward toward knee, and some time into the foot. Limb was never swollen to her knowledge. Denies that any attempts at abortion had been performed. No history of vaginal bleeding or labor pains. No history of skin eruption. About a week ago she begun improving, but after several days rapidly become worse; owing to this fact and the lack of proper attention at home, it was deemed advisable by her physicians to send her to St. Louis, about 150 miles distant.

Family History.—Parents dead; cause unknown to patient. Four brothers and two sisters being living and healthy as far as patient knows. No history of tuberculosis, malignancy, insanity.

Past History.—Has had usual disease of childhood. Always healthy up to several months ago when she developed morning nausea and vomiting, which lasted several weeks. Denies having had any venereal disease. First menstruated at age of 13, never profuse or painful, but somewhat irregularly. Never has been pregnant. States a physician told her about three weeks ago she was pregnant.

Physical Examination.— Well developed female, about 120 pounds in weight, and 5 feet 2 inches in height. Fairly well nourshed. Mammary glands enlarged, soft and not tender. Colostrum obtainable. Secondary areola of pigmentation about nipples. No striae or pigmentation about abdomen. Distinct roundish swelling in lower portion of abdomen reaching up to umbilicus. Tumor previously described. No skin eruption. Sclera white with yellowish tinge. Lips pale, pink; skin white; facial expression dull; cheeks flushed. Extremities show nothing abnormal beside that of the left thigh, already referred to, only a marked tenderness could be elicited upon deep pressure about region of great sciatic notch.

Respiratory System.—Negative.

Circulatory System.—Cardiac dulness normal. Apex beat 5th ics. space midclavicular line, invisible, palpable. No thrills. Heart sound distinct, regular, no murmurs audible. Pulse rapid, volume good, tension good, rhythm regular. Not dicrotic.

Digestive System.—Tongue thickly coated, yellowish white, clearing about margins. Breath foul; appetite poor; bowels somewhat constipated; no abdominal muscular rigidity. Some tenderness on deep pressure; spleen palpable; liver not enlarged and not tender; abdomen tympanitic excepting over tumor, which corresponds to region of an enlarged uterus. Tumor already described. No fetal heart sounds heard.

Genito-Urinary System.—External ballotement elicited on manipulating tumor. No fetal movements (quickening) seen or felt. Uterus somewhat tender. White tenaceous vaginal discharge, odorless. Vaginal palpation reveals enlarged cervix, soft, os closed. Body of uterus enlarged, extending to umbilicus and tilted toward right side. Tender; movable; ballotement obtained; adexa not palpable; no pain on urination.

Speculum examination dispensed with.

Urinalysis.—Sp. gr. 1025, orange color; acid, turbid, albumen and sugar. Microscopic Examination.—Epithelium, erythrocytes, leucoctyes; no casts. Specimen by catheter. Later, twenty-four hour quantity, 500 cc.; sp. gr. 1018; dark amber, acid, cloudy, albumen, sugar. Microscopic Examination. —Erythrocytes, leucocytes, hyaline and granular casts.

Nervous System.—Pupils equal, react normally. Knee jerks exaggerated, but equal. Left thigh hypersensitive. No Babinski;

no ankle clonus; slight tremor about fingers; no Kernig.

September 6—Pain in thigh decreased, but still present. Has complained of pain in tumor region Vomited milk curds, nauseated and refused nourishment. Late in evening restful and pain less. Fever of 102-3 deg. R. temperature; pulse rapid, but better in volume than it has been.

September 9th.— Urinary incontinence. Nausea persists manifesting itself at intervals. Pulse rapid, but good comparatively.

September 10th.—Nose bleed 7 a.m., not profuse and lasting only a short time. Picks at nose. Nervous manifestations not pronounced. Sleeps at short intervals, but is drowsy and passive when awake.

September 11th.—Feels better today than yesterday. Temperature 98 deg. R.

September 12—Temperature 103.4 R. No chills. Growing noticeably weaker and quite anemic. Decreasing in weight apparently.

Diagnosis—With the patient's statement of having had typhoid fever for past four weeks we thought we had a point to start from for a diagnosis of her present ailment. The pyrexia, enlarged spleen and abdominal tenderness favored our assumptions. However, the exceedingly rapid pulse and absence of a characteristic history of typhoid made us alert and when the Widal tests proved negative and leucocyte count of 18,000 reported we were able to exclude typhoid.

The absence of cyanosis, hurried respiration and chest symptoms ruled out miliary tuberculosis. To exclude a possible lesion in the hip complained about a radiographic picture was taken, which demonstrated nothing.

Ulcerative endocarditis was eliminated for the want of certain usual physical signs presented by the heart in such disease. Repeated blood examination showed no plasmodia malaria.

The diagnosis of pregnancy was readily and soon established from evidences I have previously enumerated.

After about a week's observation we had no other diagnosis than toxemia. There was no doubt about the woman being septic and no other focus for its origin than the uterus. The fetus at once gave us a clew to the cause sought. After repeated examination by Dr. Lyttle and myself we concluded that signs of fetal life were not present and toxemia due to a dead fetus the solution of our problem.

The urinary findings to our mind were easily accounted by a parenchymatous nephritis secondary to the toxemia. The leucocytes in the urinary specimen were explained by a mild cystitis due to the cause producng the leucorrhea which the patient had.

The pain in left thigh was explained by pressure of the uterus on nerve trunks in pelvis, but why circulatory obstruction was not concomitant we could not understand.

Treatment.—This was chiefly symptomatic. Digitalis and camphorated oil for the circulatory exhaustion and depression. After typhoid had been excluded eliminatives in form of purges, large quantities of water, etc., were administered to combat the toxemia. Liquid diet was given. Hydrotherapy for the pyrexia.

After Dr. Lyttle and myself decided upon an intrauterine cause for the toxemia we recommended patient for induced abortion. Dr. Shutt after examining the case thought it advisable to defer such procedure since he had obtained apparent fetal quickening. This could not be obtained again later on by us, therefore patient's guardian was notified of the severity of patient's condition and asked to call at hospital. As he did not respond in person or word surgical procedure was no longer considered, because a legal consent could not be had.

September 18.—Complains of sore throat today. Pharnyx inflamed. Patient since 11th had been resting easy. Never complained. Stated she was feeling better each day. Emaciation becoming plainer each day. Has been having septic pulse and temperature. No chills. Vaginal discharge still present, but not changed in nature. Pain in thigh has gone. Uterus tender. After having explained to patient about fetal movements she sometimes tells me she feels it.

September 20.—Face puffy; throat quite sore. Glands at angle of right jaw and neck swollen. Temperature normal for past three days.

September 22.— Patient about same. Coughs and has bronchitis. Throat condition subsiding. Dr. Pitzman assumed charge of the division today.

September 27.—Patient died.

SUBSEQUENT NOTES.

Autopsy Report.—Lobar pneumonia; pyonephritis; hydronephrosis; hydroureter; acute parenchymatous nephritis; acute fibrinous pleurisy; parenchymatous degeneration of liver; acute splenic tumor; hydropericardium; hydrothorax; pregnant uterus.

Kidney.—Left.— Increased in size and pale. Signs of acute parenchymatous nephritis. Right.—Ureter from kidney down to brim of pelvis is markedly dilated. Normal throughout remainder of its course. On removing capsule of kidney a very granular surface exposed. Throughout cortex numerous miliary like abscesses are seen. On sec-

tion, these white miliary masses invisible. Cortex wavy in size; some 4 mm. in diameter. Pelvis dilated. Surface smooth and glistening.

Uterus.—Seven months' fetus. Placenta attached posteriorly. Fetus not macerated.

I have been told that literature on similar cases is scarce. In a review on the literature of pregnancy complicated by pyelonephritis in the journal of Progressive Medicine, September, 1907, I found a case reported by Sieppel which resembles this one closely. The ureter was impinged upon by the pregnant uterus and the corresponding kidney contained pus. The kidney was greatly enlarged and palpated. Operation confirmed the diagnosis of pus kidney. Pregnancy six months.

Dr. Zelli of the Female Hospital, told me of a patient which presented a similar condition at autopsy. The woman was delivered at that institution about ten days before. Patient after delivery developed a stupor which I believe terminated in a coma. No convulsions at any time. The uterus remained large, and as the autopsy showed pressed upon the left ureter at the pelvic brim, giving rise to a dilated ureter, the kidneys were enlarged and soggy, the retained urine dripping from it on section. No pus in either kidney however. Kidneys showed also interstitial changes quite markedly.

Regarding the source of infection in the case at this hospital I am in doubt.

Three cases of pyelonephritis complicating pregnancy reported by Smith in the Journal of Obstetrics of the British Empire, August, 1905, in two the bacilli coli communis was found in pure culture in the urine. Milligan reports case in February, 1906, Journal of a woman who had given birth to child three weeks before admission to hospital and was operated upon and pus drained from left kidney. Recovered. Milligan reviews the literature on the subject, finding that most authors believe the ureter becomes partially occluded by compression or kinking. If due to pressure by fetus pyelonephrosis should be most common during last months of pregnancy. This Milligan states is not a fact, for symptoms usually come about middle of gestation, and that the occurrence of infection explained by presence of bacteria in ureter.

Edgar in his text-book on obstetrics states that compression of ureter by gravid uterus does not account for the pyelonephritis in pregnancy alone, and cites authors who contend that it is due to transmigration of the bacilli coli from the adjacent colon; right kidney being most often afflicted.

DISCUSSION.

Dr. Homan.—How much of this morbid museum is supposed to have existed before the patient came to the hospital? Did all of these conditions except the pregnancy develop after she entered the hospital?

Dr. Esselbruegge.—They must have, for nothing was found at the first examination except a severe toxemia for which we could not account.

Dr. Homan.—Do you suppose the dead fetus was responsible for the toxemia?

Dr. Esselbruegge.—The fetus was not dead. At least it was not macerated.

Dr. Lippe.—It is very rare that we get a case report so complete as we have had the pleasure of listening to this evening. One point that is interesting is what effect would emptying the uterus have had upon the condition. Could the patient's life have been saved? The reason that pyonephrosis occurs most frequently during the first few months of pregnancy is the pressure of the uterus upon the ureter. When the uterus has gotten out of the pelvis this pressure is removed.

Dr. Dean.—It is a question whether this condition of the kidney was due to pressure upon the ureter, or whether it was secondary to the pregnancy. The etiology of nephritis occurring during pregnancy is attributed to elimination by the fetus and subsequent absorption. I think it would have been wise to catheterize both ureters. If urine flowed from each normally then we could exclude pressure on the ureter as a cause. In these cases of toxic nephritis what toxin is present due to the fetus I cannot say. I recall a case I saw several years ago at Rochester. A case of pyelitis was brought in. Both ureters were catherized and it was found that pus was flowing from one ureter, but that there was positively no obstruction.

Dr. Esselbruegge.—As to whether this case would have been benefited by operation, I would refer to the case mentioned as having been delivered at the Female Hospital. This patient apparently was doing nicely until delivered, then became drowsy and stuporous, the autopsy showed a ureter which was impinged upon by the empty uterus. Evidently this took place when the uterus re-entered the pelvis, as is the case after delivery, while the uterus was large and above the pelvis brim it did not have this opportunity. Had this uterus undergone the proper involution perhaps the symptoms would have subsided soon. Tak-

ing this into consideration I think that our case would have been relieved by removing the uterine contents, provided subinvolution does not occur. In another similar case I would catheterize both ureters as matter of diagnostic importance. Also before attempting anything radical as means of therapeutics I would try the effect of elevating highly the foot of patient's bed, thus giving the uterus a chance to slip upward, and thus relieve pressure on ureter.

The President.—Were there any adhesions about the uterus or adnexa that fixed the uterus, or was it free?

Dr. Esselbruegge.—I don't remember that there was anything of the kind present. The autopsy did not clear up this point of pain in the thigh. The veins were not dilated.

WORKING TOWARD A QUIET CITY.—In a few days, it is promised, signs will be placed at each corner of the block surrounding every hospital in the city (New York), warning the passerby that the street is a "hospital street," and that quiet is enjoined in the neighborhood. This is putting into execution the ordinance which the Board of Aldermen passed some time ago, at the instance of Mrs. Rice, President of the Society for the Suppression of Unnecessary Noise, establishing the "quiet zones" around the hospitals. That the enforcement of this ordinance will help in the treatment as well as conduce to the comfort of hospital patients cannot be doubted. It is proposed also to enlist the children in the cause of establishing a children' Hospital Branch of the Society, the members of which will wear badges to promote an esprit de corps and will engage not to play on the street in a hospital block or in front of any house where one of the inmates is known to be ill. Still another evidence of praiseworthy activity on the part of the Society is found in the fact that there have been two convictions recently of tugboat captains for violation of the whistling law. It was proper and natural that the movement for reasonable quiet should have begun in this noise-ridden city, but its influence has spread even further than the founder of the Society had dared to hope. Chicago has recently established hospital quiet zones, similiar to those in New York, and there are other signs that a wave of protest against unrestrained noise is sweeping over the country; and even in Europe the authorities of many of the larger cities are instituting anti-noise measures.—Med. Record.

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EDITORIAL

The Annual Meeting of the St. Louis Medical Society.

THE closing meeting of its year's session was a notable one for the St. Louis Medical Society and a fitting crown for an eventful year. The reports of the various retiring officers and committees accentuated the scope of the work undertaken and accomplished, and the decided progress of the body along every line of its endeavor. President Morfit gave a resume of the work of the year as forecasted by him in his inaugural address and, modestly attributing the success to his associates, he enumerated fulfilments of promise: the society has grown, there being about one hundred more members than a year ago; it is reorganized and has an organic law which may well be copied; its sections are an established fact and are doing good work; its business has been divorced from its scientific work and now is being conducted by twelve elected men; the growth of the Ward Organization, the Civic Section, is demonstrating itself an important factor for good. Not the least of the year's results is the development of the working body, one hundred men during the year served the society in offices and on committees, each getting training which insures the future able conduct of the body; the selection of committees will hereafter be from a wealth of good material.

In closing his remarks President Morfit presented to the society a superb Projection Apparatus, the gift of Drs. H. Tuholske, W. B. Outen and O. A. Wall.

Dr. Charles Shattinger voiced the feeling of the society in their appreciation of a vigorous and effective administration and of the men who have so signally served the society in its conduct. He said:

"This is the first annual meeting I have attended since becoming a member of this body in which I have felt ennobled by the proceedings. For once, we have gotten together at the end of the year and made a serious introspection. I take it that we have learned thereby to respect ourselves, because we have been enabled to see that we could get from our midst a body of such faithful and efficient servants. In my own heart, I have a feeling toward these men who have presented their reports, such I have experienced when on a palatial steamer. With every comfort and luxury placed before me, I was filled with gratitude having in it a mingling of awe at the thought of the men below working and preparing this feast for me—for me who did not know one of them even by name. How many of our men working like this have been fully known to those who have listened to their reports tonight? How many know better than to accept the modest statement made by our President that any credit due him was because of his selection of the men working with him. Through my association with him for a short time, I have come to have some faint idea of the work he has done throughout the year. He shall not escape the credit that is his due. The achievements of the Society announced to night would not have been possible without a man of his caliber at its head. I have heard but one criticism of our President during the entire year and that is, that he did too much. I believe his conscience can let him rest at ease with that criticism. If I single him out in this fashion, it is not only to render him justice, but also because I may thus epitomize the praises of his coworkers. What I say of Dr. Morfit, I am saying of Dr. Forster, Dr. Amerland, Dr. Scherck, Dr. Otho Ball and of all the others whom we have listened to this evening. They are all formed necessary parts of an organism of which Dr. Morfit was the head.

"I know you are going to thank Drs. Wall, Tuholske and Outten for their most welcome gift, so suppose I lead you to offer one broad vote of thanks that will include them and all who have been so loyal to our interests. I call upon you to rise and by unanimous vote declare you know how well you have been served throughout the year, and that you thank them as children are thankful at this season of the year. We have had a Christmas tree of science."

Prompted by Dr. Shattinger's remarks the society by rising vote expressed its appreciation of the great work accomplished by Dr. Morfit and his associates during 1907.

The result of the annual election was then announced, the following being the elected officers for 1908:

President—Dr. Herman Tuholske.

Secretary—Dr. C. E. Burford.

Three-year Councilors—Drs. Fry, Homan, Nicholson and Orr.

Two-year Councilors—Drs. Tupper, Behrens, A. R. Kieffer and Meisenbach.

One-year Councilors—Drs. Bransford Lewis, T. A. Hopkins, Schlueter and Green.

(The treasurer and censors are elected by the Council, the vice-presidents are the chairmen of the sections).

Delegates to the State Association—Two years, Drs. Outten, Funkhouser, Cale, J. M. Ball, Grindon, Hill and Lutz; one year, Drs. W. W. Graves, D. Forster, Henderson, Hypes, Clopton, Deutsch and Engelbach.

The society by decided vote continues meeting of Saturday evening and authorizes an increase in the annual dues of one dollar.

The retiring president then introduced the president and officers for 1908. President Tuholske, in a few remarks, expressed his appreciation of the responsibility which the assumption of the chair carries with it and his deep earnestness of purpose to complete those things already begun and to make the coming year's work in harmony with the wonderful progress which has especially characterized the society during its later years.

And so ended 1907 for the St. Louis Medical Society.

The Western Surgical and Gynecological Association.

THE annual meeting of the Western Surgical and Gynecological Association was held at the Southern, in this city, on December 30th and 31st, and was just such a scientific treat as had been anticipated. The program was arranged for four sessions with seventeen addresses, with such men as C. H. Mayo, J. B. Murhpy, B. M. Ricketts, Willard Bartlett, T. C. Witherspoon, W. W. Grant, J. E. Summers, M. L. Harris, C. W. Oviatt and others equally noted on the program it is needless to say how good a meeting it was. A rather surprising feature was the lack of extensive discussion, many of the papers though tremendously interesting and of a character which would naturally provoke discussion were received without bringing any decided expression pro or con.

The local chairman, Dr. Morfit, had arranged two functions of a social character for the Association, a banquet at the Southern

and a reception at the home of Dr. Tuholske, both proved most enjoyable and served as a happy diversion from the more strenuous work of the session.

The following officers were elected:
President—Dr. W. W. Grant, Denver.
Vice-President—Dr. Willard Bartlett, St. Louis.
Secretary-Treasurer—Dr. Arthur T. Mann, Minneapolis.

The 1908 meeting will be held in Minneapolis.

New Hospital Society Officers.

THE annual election of the Medical Society Hospital Alumni occurred since our last issue and resulted in the election of the following:
President—Dr. W. E. Sauer.
Vice-President—Dr. L. H. Hemplemann.
Secretary—Dr. W. H. Luedde.
Treasurer—Dr. E. Lee Dorsett.

The committees for 1908 have been announced by President Sauer and are characterized by strength. The personnel is as follows:

Executive—Drs. Behrens, Falk and Oatman.

Scientific Communications—Drs. Williamson, Shutt and Barr.

Publication—Drs. Loeb, Mook and Greiner.

Entertainment—Drs. Hinchey, Zimmermann and Baumgarten.

Public Health and Municipal Affairs—Drs. Reder Amyx and A. E. Taussig.

The annual banquet of the society occurred on the evening of January 2. It was held at Faust's Cabin and was such a feast as only Faust knows how to serve. The criticism of the occasion was the same this year as has been heard heretofore, the society needs either great adversity or great success to create enthusiasm; there is too much deploring conditions which would be changed if a dozen men would set earnestly about it. There is nothing breeds enthusiasm like enthusiasm. A groaning board and a dolorous atmosphere do not make a festive occasion, nor do they augur well for future effort. In its past this society has been the most active medical body in our city, and its influence has been far reaching. Its work is not yet fulfilled, there is much yet to be done which it can do. If it is not to deteriorate into a body with indifferent influence it must be awake and doing, there is abundance of room for activity, the St. Louis Society has no monopoly on reform activity or on scientific progress. An expression of our views has not been asked and is gratuitously offered; we believe the men who can see no good in the future of this organization should be relegated from office into the background. We believe that there is abundant reason for both its existence and activity, and that the right men will be able to bring back its former glory. We believe that Dr. Sauer has selected good committees and that the work of the year will be aggressively definite, and that it will be a year for the general advancement of the society and of St. Louis medicine.

The Doctor's Office.

EACH city has its own especial type of physician's offices and scheme of their grouping and it is rather unusual for any radical change in this regard to manifest itself. Yet just this has been happening in St. Louis and is happening now; we are adopting a new and a better plan and doing it rapidly. Twenty years ago, except for a scattering few, the medical men of the city occupied offices improvised in their homes or annex coops built against the side of the residence building or in its yard, the few were scattered around in the dingy buildings which had at the time to serve as office buildings. Since then New St. Louis has grown, all of our sky scrapers are a product of the later part of this period. When these buildings first began to appear the physician was pleased to find almost any kind of quarters in them, rooms which had been designed for commercial purposes were even better than those he had known before and he was happy. But new needs have grown with the city's growth, the doctor has discovered that he is of the better class of tenants, that he is not constantly moving and that he is consequently "desirable." If he is desirable why should he not have offices built for his convenience and of a dignity in keeping with his calling? Why should the water be in the wrong corner and the wiring all wrong? The medical profession of St. Louis is rapidly housing itself in office buildings, but it is at the same time learning discrimination and is beginning to demand buildings constructed with a strict purpose to please medical tenants. It seems difficult for builders to catch the idea; even those buildings which have been constructed "exclusively for Physicians and Dentists" are, with one exception, very evidently purposed for commercial purposes as an eventuality. The exception is the Lister Building, which is all that it pretends to be and all that other buildings have announced themselves as purposing to be. It is built for physi-

cians and its construction could not be improved, it is in the very heart of what will permanently be as it is, the hub of the city, it has dignity, convenience, quiet, cleanliness; to become a tenant of the Lister Building has already become a desideratum. The Lister Building was constructed for physicians and purposes no other occupany; there is a dignified elegance in its construction and appointments which is felt on entering its

THE LISTER BUILDING.

portals; this has an effect on a patient which is confidence-inspiring and which is instrumental to his advantage. An office wedged among various commercial enterprises, with the janitor on one side and a type-writer exchange on the other, does not carry with it any sense of rest or seclusion, it repells. The Lister Building is something of an innovation, but it has justified its erection and has created a demand; such a building would pay down-town, in North St. Louis, in South St. Louis; the demand is here and will presently have to be met.

LOCAL MEDICAL NEWS

THE meeting of the Western Surgical and Gynecological Association brought Dr. T. C. Witherspoon back to St. Louis. The doctor spent some days with his many friends here. Butte seems to agree with him.

DR. O. E. LADEMANN, of Milwaukee, visited St. Louis recently. Dr. Lademann was located here for a time, and has many friends who are regretting that his stay was of necessity so short that he was unable to be visited, as we had hoped.

DEATH OF DR. SENN.—As we are closing copy for the printer we learn of the death of Dr. Nicholas Senn as a result of some recently developed heart trouble. Dr. Senn has been a national character for a number of years, and his death is a loss to our profession which cannot be expressed.

DR. L. M. WARFIELD has retired from the editorial management of the Medical Review after a short incumbency. During this editorship the doctor definitely established his energy and ability in this exacting work and his voluntary retirement is a matter of regret to his fellow journalists. For the time the Review appears under staff editorship, the selection of an editor-in-chief being delayed.

DEATH OF DR. SHRADY.—Dr. Geo. F. Shrady, founder and editor of the Medical Record, died at his home in New York on November 29th from pyemia consequent to cholelithiasis. His death removes an important character from the field of American medicine. His vigorous personality was felt through his journal in every quarter of the country, and though he had reached the age of 70 the acuteness shown by his pen led one uninformed to imagine him a man at the age of his greatest physical vigor.

DR. VILRAY P. BLAIR, Associate Professor of Anatomy in the Medical Department of Washington University, has lately published a Laboratory Guide for the Modeling of Human Bones in Clay, which must be of great service to teachers and students of anatomy. The satisfaction which must be felt with progress from study along the lines indicated by this guide can only be appreciated by experience. Modeling is not so difficult as at first thought appears, and no other method of study so indelibly impresses the anatomic points. The Guide is published by the Cooperative Association of the University.

MEETING OF THE COUNTY SECRETARIES.—The Secretaries of the County Medical Societies of the eastern section of the State met December 19th, 1907, at the Society Building in response to the call of Dr. Allee, president of the Missouri State Medical Assocaition. The members of the convention were the guests of the Councilors of the St. Louis Medical Society who extended the use of their building and acted as hosts at a luncheon served at the Grand Avenue Hotel. The object of the meeting was to perfect an organization among the working members of the County Societies and to facilitate the development of matters of interest to the profession.

THE REVIEWER'S TABEL

Books, Reprints, and Instruments for this department, should be sent to the Managing Editor, Century Building, St. Louis

PROGRESSIVE MEDICINE. A Quarterly Digest of Advancements, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, assisted by H. R. M. Landis, M. D., Assistant Physician to the Out-Patient Medical Department of the Jefferson Medical College Hospital. Vol. IX, No. 4. Lea Brothers & Co. Philadelphia and New York: ($6 per annum.)

The fourth number of this eminent and recognized publication is perhaps the most noted of the series of 1907. The subject "Diseases of the Digestive Tract and Allied Organs, the Liver and Pancreas," by J. Dutton Steel, is well balanced, encyclopedic and thoroughly up-to-date. Among the most noteworthy discussions may be menioned the normal and morbid physiology of the digestive tract, the morbid physiology of visceral pain, some facts about digestive ferments, gastric carcinoma and ulcer, peptic ulcer of the esophagus, chronic autointoxication of intestinal origin, the value of intestinal antiseptics, infections of the biliary tract, the causes of increased portal pressure in portal cirrhosis and the pathogenesis of acute hemorrhage and necrosis of the pancreas. Over twenty pages of well written matter is devoted to diseases of the kidneys by John Bradford. Joseph Bloodgood presents a timely elaboration on surgery of the extremities, fractures, dislocations, surgery of the joints, shock, anesthesia and infections. Thirty illustrations elucidate his text. William Belfield contributes to the advancements made in genito-urinary diseases. The chapter, "Practical Therapeutic Referendum," by H. R. M. Landis, commands the highest respect, and is perhaps the most useful to the general practitioner, as it keeps him in touch with the advancements made in therapeutics.

TRAINING IN MEDICAL ORGANIZATION.—The students of the University of Pennsylvania Medical School have formed an organization, the purpose of which is to acquaint the undergraduates with the workings of the American Medical Association, after which it is very closely modeled. The various student societies take the place of the State organizations and elect members to a House of Delegates which transacts all the business of the association. An annual meeting is held at which papers are read by chosen members, thus encouraging original research and a scientific spirit. The organization is named The Undergraduate Medical Association of the University of Pennsylvania, and already has over two hundred and fifty members.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scientific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

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Contributions and books for review should be addressed to the Managing Editor, 319 and 320 Century Building, St. Louis, Mo.

MEDICAL MISCELLANY

THE French Government employs 1,550 workmen and 15,000 women in the State tobacco manufactories, and makes a yearly profit of £16,000,000.

THE MORTALITY OF BALTIMORE.—The report of the Department of Health for the week ending December 14, 1907, shows a total of 230 deaths, as compared with 187 for the corresponding week last year. The annual death rate in 1,000 of population was 19.97—white, 17.95; colored, 30.62. The principal causes of death cere: Typhoid fever, 1; measles, 6; whooping cough, 1; diphtheria, 3; membranous croup, 1; influenza, 5; consumption, 29; cancer, 11; apoplexy, 8; organic heart diseases, 16; bronchitis, 5; pneumonia, 21; Bright's disease, 21; congenital debility, 21; lack of care, 2; old age, 5; suicide, 1; homicide, 1; accidents, 14. Ten deaths occurred at Bayview Asylum, 33 in hospitals, and 19 in other institutions. Thirty-five coroners' inquests were held.

JOURNAL OF INDIANA STATE MEDICAL ASSOCIATION.—The Fort Wayne Medical Journal-Magazine, which has existed for twenty-five years, ceased publication with the December issue. The Council of the State Medical Association is to establish a new journal to publish its transactions, which will be known as the Journal of the Indiana State Medical Association. Dr. Albert E. Bulson will act as the editor and business manager, and Dr. Benjamin Weaver as assistant editor. The Journal will be published in Fort Wayne.

PILOCARPINE IN SYPHILIS.—W. J. Robinson, after considerable experience with pilocarpine in the treatment of syphilis, reaches these conclusions: 1. Pilocarpine is a most remarkable glandular eliminant, and glandular elimination is one of the most important factors in the successful treatment of syphilis. 2. Pilocarpine is of value in all secondary manifestations of the disease. 3. There are many cases which become intolerant to the further use of mercury; the system seems supersaturated and continuing the mercury in such cases means injuring the patient. Discontinuing the mercury, giving pilocarpine in the interval, enables us to resume the former drug with excellent effect. 4. Pilocarpine should be prescribed alone, either in pills or solution, and should be given in doses of two to eight milligrams (1-32 to 1-8 gr.) two to three times a day.—Medical Record.

SLEEPING SICKNESS COMMITTEE.—An independent sleeping sickness committee has been formed in Liverpool, England, with Sir Alfred Jones as chairman. The object of the committee is to collect information dealing with sleeping sickness and to stimulate research into the cause, method of transference and cure of the disease, and to publish from time to time communications regarding it. In addition to Sir Alfred Jones, the members of the committee include Dr. Richard Caton, the Lord Mayor of Liverpool; Prof. B. Moore, director of the biochemical department of the University of Liverpool; Professor Salvin-Moore, director of the cytological department; Prof. H. E. Annett, director of the department of comparative pathology; Prof. C. S. Sherrington, director of the physiological department; Dr. J. W. W. Stephens, Walter Myers, lecturer in tropical medicine; Dr. Anton Breinl, director of Runcorn Research Laboratories; Dr. W. T. Prout, Mr. Arthur J. Evans, Dr. M. Nierenstein and Dr. J. L. Todd, of Montreal. The corresponding secretaries are Prof. Sir Rupert Boyce, dean of the Liverpool School of Tropical Medicine, and Mr. A. H. Milne.

WHAT is the dose? Just enough to produce the effect that is desired.

Before incising a pharyngeal abscess through the mouth a small, hard pillow should be placed under the patient's shoulders, so that the head will drop back sufficiently to prevent the pus from flowing downward.

TREATMENT OF ECZEMA BY STEAM.—Dr. A. Liberson, in two cases, observed that a current of steam of 40 to 50 deg. C. (104 to 122 deg. F.) directed to the affected parts of the skin in eczema removes crusts and scales, occasions increased scaling of the epidermis, favors the absorption of superficial and deeper infiltrations of the skin, diminishes or even entirely stops formation of pus on the surfaces deprived of epidermis, and at the same time produces increased regeneration of tissues where, on account of chronic processes, the conditions for healing are very unfavorable. The apparatus which the author uses consists of a thick copper cylinder containing two or three glasses, the bottom one being heated with an alcohol-lamp. On the top are two openings—one for pouring in water (closed by means of a screw), and the other for a bent tube. According to the sensibility of the skin, the tube is kept three to five inches from it. The seance lasts fifteen to thirty minutes.

SOMETHING NEW WHICH IS EFFECTIVE IN GASTRO-INTESTINAL TROUBLES.—Among the newer remedies which are attracting the attention of the profession is one drug which seems to posess a high degree of merit because of which it is coming into general use. We refer to validol, a ester of valerianic acid and menthol, which possesses the therapeutic properties of both these agents in an enhanced degree, while it is entirely free from their greatest disadvantages, namely, the biting acridness and irritating action of the menthol and the nauseating taste of the valerian. Validol has been used extensively and with surprisingly good results in gastralgia, gastritis, hyperemesis gravidarum, seasickness, cardialgia, migraine, hysteria, syncope, neuralgia and all the reflex neuroses; it has also proved an efficient anthelmintic. The product has a mild and pleasant odor and a refreshingly cool and faintly bitter taste; it is given in 10 to 15 drop doses 3 to 4 times daily, preferably on a lump of sugar or in a little sweet wine and is thus readily taken even by women and children. It may also be applied externally or administered by inhalation, a few drops applied to the nostrils influencing most favorably an incipient cold in the head and attacks of hay fever.

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Philadelphia, Pa., March 28th, 1907.

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The Antikamnia Calender for 1908.—The series of calendars which come from year to year from the Antikamnia Chemical Company has established itself in the interest of the profession, the freckle faced boy who adorns that for 1908 may not be called beautiful but he brings a message of good cheer.

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For Nervousness, sleeplessness and sexual excitement, characterized by erections or even chordee, various authorities vary in their recommendations. Ringer recommends the use of aconite and camphor. Bartholow and Phillips both advise the administration of lupulin. The value of Hyoscyamus has been appreciated by many medical men for a long time, and is quite valuable. Bromidia is to be highly recommended, since it consists of chloral, bromide, hyoscyamus and cannabis indica, and acts as a somnifacient, spinal sedative and hypnotic. The dose is a drachm to two drachms an hour before bed time.—American Journal Dermatology.

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